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**Nomenclatorial, taxonomic and faunistic notes on some
Palaearctic genera and species of ground-beetles
(Coleoptera, Carabidae: Apotomini, Chlaeniini, Cyclosomini,
Harpalini, Lebiini, Licinini, Platynini, Siagonini, Sphodrini)**

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A b s t r a c t: In the "Catalogue of Palaearctic Coleoptera, Volume 1", 2003 (CATPAL) numerous new nomenclatorial and taxonomic changes were made in the tribe Harpalini. This paper gives detailed information concerning some of the Carabidae involved. Detailed information is provided about the following synonymies, previously proposed in CATPAL (with senior synonym listed first): *Dixus eremita* (DEJEAN 1825) = *Aristus punctulatus* CHAUDOIR 1844 = *Ditomus capito* var. *orientalis* J. SAHLBERG 1913 = *Ditomus tanaiticus* LUTSHNIK 1933. *Dixus moloch* (PIOCHARD DE LA BRÜLERIE 1873) = *Aristus subconstrictus* REITTER 1900. The genus *Nesarpalus* BEDEL 1897 was treated in a new nomenclatorial sense, as the name *Harpalus vividus* DEJEAN was unavailable. *Ophonus laticollis* MANNERHEIM 1825 was used as replacement name for *Ophonus punctatulus* (DUFTSCHMID 1812), nec *Carabus punctatulus* FABRICIUS 1792, as the use of the name *nitidulus* by STEPHENS 1828 was a misidentification. Detailed information about a new combination, previously proposed in CATPAL is provided: *Penthophonus ophonoides* JEDLIČKA 1958 = *Ophonus* (*Metophonus*) *ophonoides* (JEDLIČKA 1958). Lectotypes are designated in this paper for: *Aristus curtangulus* REITTER 1900; *Aristus moloch* PIOCHARD de la BRÜLERIE 1873; *Aristus punctulatus* CHAUDOIR 1844; *Ditomus capito* var. *orientalis* J. SAHLBERG 1913; *Ditomus tanaiticus* LUTSHNIK 1933. Re-descriptions are given of: *Dixus eremita* (DEJEAN 1825), *Dixus klapperichi* (JEDLIČKA 1964), *Dixus moloch* (PIOCHARD DE LA BRÜLERIE 1873), *Dixus semicylindricus* (PIOCHARD DE LA BRÜLERIE 1872) and *Ophonus* (*Metophonus*) *ophonoides* (JEDLIČKA 1958), including tables with values of measurements and various ratios, illustrations of median lobe and other body parts important for discrimination, information about intraspecific and geographic variability, types, synonymies and also revised distribution data. New synonyms are as follows, with junior synonym listed first: *Acinopus khalensis* ALI 1967 = *Acinopus megacephalus* (ROSSI 1794); *Ophonus musayabensis* ALI 1967 = *Ophonus sabulicola* (PANZER 1796). *Carabus cordatus* DUFTSCHMID 1812 (= *Ophonus cordatus*) is proposed as nomen protectum and *Carabus cordatus* SCOPOLI 1763 as nomen oblitum. Following species are mentioned with detailed records for the first time (though sometimes already formally mentioned in CATPAL): *Apotomus syriacus* JEDLIČKA 1961: Iran (Sīstān va Baluchestān); Pakistan: (Baluchistān). *Chlaenius* (*Dinodes*) *viridis* MÉNÉTRIÉS 1832: Griechenland (Fokida). *Tetragonoderus* (s.str.) *intermedius* SOLSKY 1874: Iran (Hormozgān). *Amblystomus algirinus* REITTER 1887b: Europe: Portugal (Faro). *Amblystomus niger* (HEER 1841): Azerbaijan; Georgia; Iran (Čahār Mahall-o-Bahtyārī, Fārs); Kazakhstan; Uzbekistan. *Amblystomus rectangularis* REITTER 1883: Azerbaijan. *Progonochaetus* (s.str.) *indicus* KATAEV 2002b: Nepal. *Progonochaetus* (s.str.) *laevistriatus* (STURM 1818): Nepal. *Carenochyrus titanus* SOLSKY 1874: Iran (Khorāsān). *Carterus* (s.str.) *dama* (P. ROSSI 1792): Rumänien.

Carterus (s.str.) *givilipes* (PIOCHARD DE LA BRÜLERIE 1873): Portugal (Faro). *Dixus interruptus* (FABRICIUS 1775): Israel; Türkei (Antalya). *Dixus semicylindricus* (PIOCHARD DE LA BRÜLERIE 1872): Pakistan (Chitral); Indien (Uttar Pradesh); China (Xinjiang). *Eucarterus sparsutus* (REITTER 1898): Griechenland (Ahaia, Préveza); Iran (İlam, Lorestan, Kordestan). *Penthus tenebrioides* (WALTL 1838): Bulgarien (Stara Zagora); Iran (Hamadan, Kordestan). *Pseudarisus modestus* (SCHAUM 1858): Jordaniens (Irbid). *Acinopus* (s.str.) *laevigatus laevigatus* MÉNÉTRIÉS 1832: China (Gansu; Xinjiang). *Acinopus* (*Haplinopus*) *striolatus* ZOUBKOFF 1833: Türkei (Ağrı). *Bleusea ammophila* TSCHITSCHÉRINE 1898a: Iran (Sistān va Baluchestān); Israel. *Daptus komarovii* SEMENOV 1889: Syria (Al Hasakah, Halab); Iran (Khuzestan); Irak (Baghdad); Israel. *Harpalus* (*Cryptophonus*) *idiotus* BATES 1889: Pakistan (North West Frontier Province). *Harpalus* (s.str.) *aequicollis* MOTSCHULSKY 184: Gansu (China). *Harpalus* (s.str.) *amarellus* BATES 1891: Uttar Pradesh (Indien). *Harpalus* (s.str.) *angustitarsis* REITTER 1887a: Ardèche, Aude (Frankreich). *Harpalus* (s.str.) *cisteloides hurkai* DIVOKÝ, PULPÁN & RÉBL 1990: Rumänien (Bihor). *Harpalus* (s.str.) *froelichii* STURM 1818: Griechenland (Ágio Oros, Dramá, Évros, Thessaloníki). *Harpalus* (s.str.) *inxpectatus* KATAEV 1989: Türkei (Ağrı). *Harpalus* (s.str.) *masoreoides* BATES 1878: Pakistan (Jammu und Kashmir, North West Frontier Province). *Harpalus* (s.str.) *politus politus* DEJEAN 1829: Frankreich (Lozère). *Harpalus* (s.str.) *punctostriatus* DEJEAN 1829: Zypern (Lemesos). *Harpalus* (s.str.) *subcylindricus* DEJEAN 1829: Ioánnina, Kavála, Larissa (Griechenland). *Harpalus* (s.str.) *xanthopus* *winkleri* SCHAUBERGER 1923: Griechenland (Thessaloníki). *Harpalus* (*Semiophonus*) *signaticornis* (DUFTSCHMID 1812): Iran (Ázrbaygán-e Bakhtari). *Harpalus* (*Pseudoophonus*) *suensonii* KATAEV 1997: Hubei, Shaanxi, Sichuan (China). *Harpalus* (*Zangoharpalus*) *tinctulus luteicornoides* BREIT 1913: Hubei (China). *Nipponoharpalus discrepans* (A. MORAWITZ 1862): Hubei, Shanxi (China). *Ophonus* (*Hesperophonus*) *convexicollis* MÉNÉTRIÉS 1832: Bulgarien (Tolbukhin). *Ophonus* (*Hesperophonus*) *cibricollis* (DEJEAN 1829): Iran (Ázrbaygán-e Bákhtari); Israel. *Ophonus* (*Hesperophonus*) *jailensis* (SCHAUBERGER 1926): Türkei (Ankara, Antalya, Artvin, Kastamonu, Kocaeli, Zonguldak). *Ophonus* (*Hesperophonus*) *minimus* MOTSCHULSKY 1845: Türkei (Kars). *Ophonus* (*Hesperophonus*) *similis* (DEJEAN 1829): Iran (Ázrbaygán-e Garbi, Gilan, Khuzestan). *Ophonus* (*Hesperophonus*) *subquadratus* (DEJEAN 1829): Iran (Färs); Syrien (Tartus). *Ophonus* (*Metophonous*) *gabrieleae* WRASE 1987: Griechenland (Préveza). *Ophonus* (*Metophonous*) *gammeli* (SCHAUBERGER 1932): Griechenland (Píeria/Lárissa). *Ophonus* (*Metophonous*) *hittita* SCIAKY 1987: Iran (Hamadan). *Ophonus* (*Metophonous*) *israelita* PIOCHARD de la BRÜLERIE 1875: Iran (Ázrbaygán-e Bákhtari, Hamadan). *Ophonus* (*Metophonous*) *judaeus* PIOCHARD DE LA BRÜLERIE 1875: Jordaniens (Ammān, Irbid, Maān); Syria (Idlib). *Ophonus* (*Metophonous*) *stricticollis* TSCHITSCHÉRINE 1893: Sichuan (China). *Ophonus* (*Metophonous*) *subsinuatus* REY 1886: Israel. *Ophonus* (*Metophonous*) *transversus* MOTSCHULSKY 1844: Altai Republik (Rußland). *Ophonus* (*Metophonous*) *veluchianus* G. MÜLLER 1931: Rumänien; Iran (Ázrbaygán-e Garbi); Syria (Al Ladhiqiyah). *Ophonus* (s.str.) *diffinis* (DEJEAN 1829): Iran (Ázrbaygán-e Bákhtari). *Ophonus* (s.str.) *franziniorum* SCIAKY 1987: Französisches Festland (Var). *Paraphonus* (s.str.) *dia* REITTER 1900: Zypern (Larnaca). *Paraphonus* (s.str.) *vigil* TSCHITSCHÉRINE 1901: Türkei (Bingöl, İçel, Urfa). *Paraphonus* (s.str.) *planicollis* (DEJEAN 1829): Iran (Mázandarān). *Acupalpus* (*Palcuapus*) *inornatus* BATES 1873: Hunan (China). *Loxoncus circumcinctus* (MOTSCHULSKY 1858): Fujian, Hubei (China). *Stenolophus* (*Egadroma*) *bajaurae* ANDREWES 1924: Uzbekistan (Surkhandarya); Indien (Delhi). *Stenolophus* (*Egadroma*) *difficilis* (HOPE 1845): Hubei (China). *Stenolophus* (s.str.) *discophorus* FISCHER VON WALDHEIM 1823: Syrien (Al Ladhiqiyah). *Stenolophus* (s.str.) *liebmanni* J. MÜLLER 1931: Israel; Syrien (Al Ladhiqiyah). *Stenolophus* (s.str.) *steveni* KRYNICKY 1832: Iran (Mázandarān). *Platytarus faminii* *faminii* (DEJEAN 1826): Iran (Färs, Hormozgān, Khorāsān). *Lebia* (s.str.) *cruxminor cruxminor* (LINNAEUS 1758): Iran (Lorestān, Tehrān); Jordaniens (Al Karak, Maān). *Lebia* (s.str.) *cyanocephala cyanocephala* (LINNAEUS 1758): Jordan (Maān). *Lebia* (s.str.) *trimaculata* (LINNAEUS 1758): Iran (Ázrbaygán-e Garbi, Färs, Khorāsān). *Licinus* (s.str.) *aegyptiacus* DEJEAN 1826: Jordan. *Badister* (s.str.)

meridionalis PUEL 1925: Iran (Gilan); Türkei (Edirne, Afyon, Ankara). *Atranus ruficollis* (GAUTIER DE COTTES 1858): Syrien (Hama). *Calathus (Neocalathus) peltatus* KOLENATI 1845: Iran (Khorāsān). Confirmation of hitherto doubtful records are given for: *Siagona longula* REICHE & SAULCY 1855: Türkei (İçel). *Scybalicus oblongiusculus* (DEJEAN 1829): Türkei (Van). *Acinopus (Haplacrinopus) striolatus* ZOUBKOFF 1833: Iran (Khorāsān, Hamadān). *Ophonus (Hesperophonus) subquadratus* (DEJEAN 1829): Marokko (Tétouan). *Ophonus (Metophonous) gabrieleae* WRASE 1987: Syrien (Tartus). *Ophonus (Metophonous) israelita* PIOCHARD DE LA BRÜLERIE 1875: Türkei (Adiyaman, Gaziantep, Şanlı Urfa). *Badister* (s.str.) *brevicollis* REICHE 1875: Griechenland (Ahaia, Ártia, Préveza). *Badister* (s.str.) *bullatus* (SCHRANK 1798): Spanien (Leon, Lugo, Salamanca, Jaén?/Madrid?/Tarragona?).

Key words: Coleoptera, Carabidae, Apotomini, Chlaeniini, Cyclosomini, Harpalini, Lebiini, Licinini, Platynini, Siagonini, Sphodrini, *Acinopus*, *Acupalpus*, *Amblystomus*, *Apotomus*, *Atranus*, *Badister*, *Bleusea*, *Calathus*, *Carenochyrus*, *Carterus*, *Chlaenius*, *Daptus*, *Dixus*, *Eucarterus*, *Harpalus*, *Lebia*, *Licinus*, *Loxoncus*, *Nesarpalus*, *Nipponoharpalus*, *Ophonus*, *Paraphonus*, *Penthus*, *Platytarus*, *Progonochaetus*, *Pseudaristus*, *Scybalicus*, *Siagona*, *Stenolophus*, *Tetragonoderus*, nomenclature, taxonomy, type species, lectotype designation, new synonyms, nomen protectum, nomen oblitum, distribution data, first or confirmed records, palaearctic region, oriental region.

Introduction

While working on my part of the "Catalogue of Palaearctic Coleoptera, Volume 1" (referred to from now on as CATPAL), which was published in 2003, I had to focus my attention on many taxa which had an unclear status or were enigmatic due to their rarity. The investigation of types of some taxa revealed in some cases a different point of view and therefore nomenclatorial and taxonomic changes were required, the same was caused by the discovery that some names, though used by generations of entomologists, were not available in a nomenclatorial sense or caused by misinterpretation. Based on recently acquired information, some names were synonymized or appeared in a new combination. This paper gives detailed information on the reasons for the decisions made in the "Catalogue", additionally, some new nomenclatorial and taxonomic changes (new synonyms) are given here.

The paper is divided in two parts, the first one contains nomenclatorial and taxonomic notes concerning some taxa. The second one deals with faunistical data. As I was able to see, at least partly, a large material of the species in question, I can give, also based on preliminary studies, some first detailed records for some countries or provinces. Some of these records were already formally cited in CATPAL without mentioning that it is a new record for that country or province.

Methods

Total body length (BL) is measured from the clypeus to the apex of the right elytron; the width of the head (HW) as the maximum linear distance across the head, including the compound eyes (or including the temples, if the maximum linear distance across the head is situated here); the length of the pronotum (PL) from the anterior to the posterior margin along the midline; the length of the elytra (EL) from the tip of scutellum to the

apex of the right elytron; the width of the pronotum (PW) and elytra (EW) at their broadest point; the width of the pronotal base (PBaW) between the tip of the hind angles. These measurements, made at a magnification of 12.8X and using an ocular micrometer in a SM 20 stereobinocular microscope (Carl Zeiss Jena), were combined in ratios or added as follows:

PW/PL: width /length of pronotum;

PW/HW: width of pronotum /width of head;

PW/PBaW: width of pronotum /width of pronotal base;

EL/EW: length/width of elytra;

EW/PW: width of elytra/ width of pronotum;

EL/PL: length of elytra/length of pronotum;

HT: holotype;

PT: paratype;

LT: lectotype;

PLT: paralectotype.

Microsculpture was examined at a magnification of 100X.

Line drawings were prepared by using an ocular grid (15X15 squares) attached to a SM 20 stereobinocular microscope. Dissections were made with standard techniques, median lobes were preserved in Euparal on acetate labels, other parts glued to cards, and pinned beneath the specimens from which they had been removed.

Due to the great variability in the genus *Dixus* it seemed me useful to designate lectotypes for some taxa, for having an unique bearer of the name.

Material

Material examined is housed in the collections of institutions or in private collections as listed below:

DEI Deutsches Entomologisches Institut, Müncheberg, Germany (L. Zerche, M. Behne)

MNHP Muséum National d'Histoire Naturelle, Paris, France (Th. Deuve)

MNHUB.....Museum für Naturkunde der Humboldt-Universität, Berlin, Germany (M. Uhlig, B. Jaeger)

MRSNT Museo Regionale di Scienze Naturali, Torino, Italy (M. Daccordi)

NHMW.....Naturhistorisches Museum, Vienna, Austria (H. Schönmann, E. Kirschenhofer)

NKME Naturkundemuseum Erfurt, Erfurt, Germany (M. Hartmann)

NMP Národní Museum v Praze, Prague, Czech Republic (J. Hájek)

SMNS.....Staatliches Museum für Naturkunde, Stuttgart, Germany (W. Schawaller)

TAU.....Zoological Museum of the Tel Aviv University, Tel Aviv, Israel (material made available by V. Chikatunov)

TMB Természettermészeti Múzeum, Budapest, Hungary (G. Szél)

ZFMK.....Zoologisches Forschungsinstitut und Museum Alexander Koenig, Bonn, Germany (M. Schmitt, K. Ulmen-Kürtting)

ZISP Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia (B. Kataev)

ZMA Zoölogisch Museum Amsterdam, Amsterdam, Netherland (B. Brugge, T. Lackner)
ZMUH Zoological Museum, University of Helsinki, Helsinki, Finland (H. Silfverberg, O. Biström)
cBAS Coll. J. Bašta, Brno, Czech Republic
cBUL Coll. P. Bulirsch, Prague, Czech Republic
cEGG Coll. M. Egger, Wattens, Austria
cERB Coll. D. Erber: in Forschungsinstitut Senckenberg, Frankfurt/Main, Germany, (Damir Kovač)
cFACCH Coll. S. Faccchini, Piacenza, Italy
cFAR Coll. J. Farkač, Prague, Czech Republic
cHAJ Coll. E. & P. Hajdaj, Ježov, Czech Republic
cHZ Coll. W. Heinz, Schwanfeld, Germany
cKAŠP Coll. L. Kašpar, Česká Lípa, Czech Republic
cKM Coll. R. Kmeco, Litovel, Czech Republic
cKOP Coll. T. Kopecký, Hradec Králové, Czech Republic
cKR Coll. Zd. Kraus, Mikulovice, Czech Republic
cKUČ Coll. E. Kučera, Soběslav, Czech Republic
cLOH Coll. R. Lohaj, Košice, Slovak Republik
cMAC Coll. J. Macek, Prague, Czech Republic
cMAL Coll. Z. Malinka, Opava, Czech Republic
cORSZ Coll. K. Orszulik, Frýdec-Místek, Czech Republic
cPROUZ Coll. J. Prouza, Hradec Králové, Czech Republic
cRES Coll. K. Resl, Uhersky Brod, Czech Republic
cŘIH Coll. J. Říha, Teplice, Czech Republic
cSCH Coll. U. Schaffrath, Kassel, Germany
cSCHN Coll. P.H. Schnitter, Halle, Germany
cSK Coll. Vl. Skoupý, Kamenné Žehrovice, Czech Republic
cŠKOR Coll. M. Škorpík, Znojmo, Czech Republic
cŠL Coll. M. Šlachta, České Budějovice, Czech Republic
cVÁV Coll. J. Vávra, Ostrava-Hrabůrka, Czech Republic
cWR Coll. D.W. Wrase, Berlin, Germany

Nomenclatorial and Taxonomic Part

Tribe **H a r p a l i n i**

Subtribe **D i t o m i n a**

Genus **Dixus** BILLBERG 1820

***Dixus eremita* (DEJEAN 1825)**

Ditomus eremita DEJEAN 1825: 447 (loc. typ.: "Caucase").

Ditomus nitidulus DEJEAN 1825: 447 (loc. typ.: "Caucase").

Ditomus megacephalus WALTL 1838: 451 (loc. typ.: "Um Konstantinopel" [Istanbul, Turkey]).

Aristus punctulatus CHAUDOIR 1844: 476 (loc. typ.: "Syrie").

Ditomus talpa REDTENBACHER 1850: 47 (loc. typ.: "Farsistan" [province Fars, Iran]).

Aristus perforatus REICHE & SAULCY 1855: 589 (loc. typ.: "Naplouse" [Shekhem, Israel]).

Aristus curtangulus REITTER 1900: 46 (loc. typ.: "Haifa").

Ditomus capito var. *orientalis* J. SAHLBERG 1913: 27 (loc. typ.: ad flumen Meandron" [Menderes river, Turkey]).

Ditomus tanaiticus LUTSHNIK 1933: 177 (loc. typ.: "Rostov").

Type material

Ditomus eremita DEJEAN (Coll. Dejean in MNHP): Holotype ♂, labelled: "eremita. Stev"; "Caucase" (both labels black hand print by Dejean on white label); "Ex Musæo Chaudoir" (red printed and red margined on white label). Additional labels added stating: "HOLOTYPE Ditomus eremita Dejean, 1825 Wrase labelled 2002" and: "Dixus eremita (Dejean, 1825) Wrase det. 2002" (first label black print on red label, second label black print on white label).

Aristus punctulatus CHAUDOIR (Coll. Chaudoir in MNHP): Lectotype ♂, herewith designated, labelled: "punctulatus mon. la Brûlerie.;" "Syrie" (black handwriting by Chaudoir on white label); "Ex Musæo Chaudoir" (red print, red margined on white label). 1 paralectotype ♂, only with label: "Ex Musæo Chaudoir" (red print, red margined on white label). 1 paralectotype ♀, labelled: "punctulatus Chaud."; "Syrie" (black handwriting by Chaudoir on white label); "Ex Musæo Chaudoir" (red print, red margined on white label). Additional labels added stating (lectotype): "LECTOTYPE Aristus punctulatus Chaudoir, 1844 Wrase design. 2002"; paralectotypes: "PARALECTOTYPE Aristus punctulatus Chaudoir, 1844 Wrase design. 2002" (black print on red label); all specimens with added label stating: "Dixus eremita (Dejean, 1825) Wrase det. 2002" (black print on white label).

Aristus curtangulus REITTER (TMB): Lectotype ♂, herewith designated, labelled: "Syrien Haifa Reitter" (black print, black margined on white label); "A. curtangulus m. 1898" (black handwriting by Reitter on white label); "coll. Reitter" (black print on white label) and with a label subsequently added: "Holotypus 1899 Aristus curtangulus Reitter" (red print, red margined on white label, species and author's name written by an unknown hand). 2 paralectotypes ♀ ♀, labelled: "Syrien, Haifa, Reitter" (black print on white label); "coll. Reitter" (black print on white label) and with a label subsequently added: "Paratypus 1899, Aristus curtangulus Reitter" (red print, red margined on white label, species and author's name written by an unknown hand). Additional label added stating (lectotype): "LECTOTYPE Aristus curtangulus Reitter, 1900 Wrase design. 2002"; paralectotypes: "PARALECTOTYPE Aristus curtangulus Reitter, 1900 Wrase design. 2002" (black print on red label); all specimens with added label stating: "Dixus eremita (Dejean, 1825) Wrase det. 2002" (black print on white label).

Ditomus tanaiticus LUTSHNIK (ZISP): Lectotype ♂, herewith designated, labelled: "Ростов н/Д., Д. Довнар [Rostov n/Don, D. Dovnar], 10.V.1918" (handwritten in black on white label, partly black margined). Additional labels added stating: "LECTOTYPE Ditomus tanaiticus Lutshnik, 1933 Wrase design. 2002" (black print on red label); "Dixus eremita (Dejean, 1825) Wrase det. 2002" (black print on white label).

Ditomus capito var. *orientalis* J. SAHLBERG (ZMUH): Lectotype ♀, herewith designated, labelled: "Fl. Meandros"; "J.Sahlberg" (black print on white label); "*Aristus* capito Dej. var. *orientalis* n. v.;" "var. *orientalis* J. Sahlb." (black handwriting on white label, black margined). Additional labels added stating: "LECTOTYPE Ditomus capito var. *orientalis* J. Sahlberg, 1913 Wrase design. 2002" (black print on red label); "Dixus eremita (Dejean, 1825) Wrase det. 2002" (black print on white label).

Other material examined

More than 380 specimens from Macedonia, Albania, Greece, Bulgaria, Romania, Moldavia, Ukraine, Russia, Azerbaijan, Armenia, Cyprus, Rhodes, Turkey, Iran, Iraq, Syria, Lebanon, Israel, Jordan, Kazakhstan, Uzbekistan, Kirghizstan, Turkmenistan and Tadzhikistan.

Distribution

From the Balkans in the west, Cyprus, the Anatolian Peninsula, the Caucasus, southern Russia and the Middle East to southern Iran and Middle Asia (Kopetdagh, Tienšan, Pamir-Alai) and Hindukush in the east and south-east. I did not see specimens from Afghanistan but JEDLICKA (1956: 191) mentioned two localities from there (probably the specimens should be checked again to ensure they really belong to this species and not to *D. semicylindricus* PIOCHARD).

Recognition

A reddish to dark piceous, middle-sized species with head normally with distinct frontal impression and, as a rule, rectangular pronotal hind angles. For values of measurements and ratios see Tabl. 1. Fig. 25 pictures the habitus of the holotype.

Elytra parallel with well developed humeri, relatively flat. Intervals slightly convex with puncturation consisting of 1 to 2 punctures in a irregular row, relatively strong and dense (in western populations) or sparser and finer (in eastern and south-eastern populations). The microsculpture of the surface in females not remarkable or only slightly stronger developed than in males. Abdomen on sternite 2 to 5 with two small oblong tomentous spots at middle.

Median lobe in dorsal or ventral aspect wide and gradually narrowed apicad, internal sac lacks any stronger chitinized structures like spines or thorns, but in ventral aspect with characteristic folds of microtrichial fields, beside two lateral folds, situated apically, a large oblique fold in about the middle (Figs 1-4), which can be difficult to recognize if the specimen is immature (as in Fig. 5). Median lobe in lateral aspect see Fig. 7.

Intraspecific and geographical variability

Dixus eremita is an extremely variable species. Beside the variability in body size, in puncturation and in the development of frontal impressions a sexual dimorphism results in different characteristics of males and females, connected with allometric trends (as in many other species of Harpalini). That means that there are differences in proportions correlated with changes in absolute size of the specimens, or of the specific body parts under consideration. Measurements indicate that specimens of *Dixus* of larger size normally have a stronger developed head with well, sometimes enormously developed, temples (sometimes the maximum linear distance across the head is situated here) and a more transverse pronotum than have smaller specimens of the same species, so also in *D. eremita*. The value for the ratio PW/HW is lower and for the ratio PW/PL is higher in larger than in smaller specimens. This trend is more developed in males than in females, so smaller males can have similar values for the mentioned ratios like females. The frontal impressions (a character used very often by authors) in *D. eremita* are, as a rule, more distinctly developed in larger than in smaller specimens, in which the impressions have the tendency to become indistinct or, in some cases, are not developed, that the frons is completely even, but this can also be observed in bigger specimens. I had the opportunity to study a smaller series, stored in the Piochard Collection (in MNHP) under the bottom label "punctulatus". They are labelled with "Jerusalem" (6 specimens), or "Napious" and "Carmel" (1 by 1 specimen), additionally I saw two specimens with "Jerusalem" (1 in DEI, 1 in the Heyden Collection in DEI), which came directly, accor-

ding to the labels, from Piochard to Heyden or to Stierlin, which collections are incorporated now in the DEI Collection. It deals mostly with smaller specimens, some have an even frons, but some have the frontal impressions suggested or developed. Obviously Piochard had never seen the types of *Ditomus punctulatus*, as he characterized (1873: 22) this species, in comparison to *eremita*, by its smaller size and smaller head without frontal impressions.

The hind angles of the pronotum are well developed, as a rule, rectangular, sometimes a little directed outwards, but in rare cases also obtuse-angled or even somewhat roundet at tip. Like other *Dixus* species *D. eremita* vary also markedly with respect to the body size. The largest specimen I have seen (a male from Nazareth in the ZMUH) measures 11.1 mm, the smallest (a male, too, from Bucak, Turkey, cWR) has a body size of just 6.9 mm.

Additional to the intraspecific variability there is to state a variability in respect to the geographical distribution. Members of populations from the Balkans, southern Russia and Turkey have a relative strong and dense puncturation of the surface, especially on the elytra, whereas the puncturation has the tendency to become finer and sparser in specimens from the Near East and Middle Asia, but this difference is not absolute and there are exceptions in a certain number of individuals.

Notes about types

Dejean made in the description of *Ditomus eremita* no statements, that he had more than one specimens to study. After asking for type material I received only one specimen (identified by labels, given in the description). In the Dejean Collection are still some other specimens under "eremita", all without any labels, but there is no certainty, if they come really from the Dejean Collection or were later added from other collections (Th. Deuve in litt.). Taking this and the description into consideration, I assume, that the description is really based on a single specimen. Therefore I have labelled this specimen, a pinned male (in best condition, now glued to a card) as holotype (habitus see Fig. 25). The investigation of the genital showed, that the apical part of the median lobe was broken away (and could also not be discovered in the abdomen) but the internal sac of the median lobe shows the long oblique fold, characteristic for *eremita* (Fig. 1). The head has two distinct frontal impressions, the puncturation of the surface is strong and dense, as usual for members of the populations from the western range. For measurements and values for ratios see Tabl. 2.

The description of *Aristus punctulatus* CHAUDOIR is based on more than one specimen. I received three pinned syntypes (2 males and 1 female, now glued to cards) and have designated a lecto- and paralectotypes (for labelling see above). The males are in best condition, the head of the female is partly broken and has some fissures at the right side. The frontal impressions of the head in all specimens are distinct, the puncturation of the surface is finer and sparser, as usual for members of the populations from the eastern and southeastern range. For measurements and values for ratios see Table 2, for the medianlobe of the lectotype Fig. 2.

Reitter compared his *Aristus curtangulus* with *eremita* and mentioned in the description more than one specimen. I saw three pinned syntypes (1 male and 1 female, now glued to cards, and a female, still pinned) and have designated the male as lecto- and the remaining two female specimens as paralectotypes. The frontal impressions of the head are

distinct in the lectotype and in one paralectotype, and only suggested in the third paralectotype. The puncturation of the surface is finer and sparser, as usual for members of the populations from the eastern and southeastern range. For measurements and values for ratios see Table 2.

Lutshnik mentioned only 2 specimens in the description of his *Ditomus tanaiticus*. The first one ("Ростов на Дону, V 1913, В.Н. Лучник", [Rostov at Don, V.N. Lutshnik]), could not be found in the collection of the ZISP, but the second one I received, which label (for details, see above) agrees with the data, mentioned in the description. It is a male and I have designated it as lectotype. A second sent specimen, labelled as follows: "Ростов н/ Д., Довнар [Rostov n/D., Dovnar], a male too, is with certainty not a type, though it comes from the type locality, as in the description was only one specimen, collected by Dovnar, mentioned above. Both specimens were originally pinned and now glued to cards, part of the appendages are missing, but the condition allows the recognition of important characters. The puncturation of the surface is fairly strong and dense, almost rough, the frontal foveae are well developed in both specimens and the internal sac of the median lobe has the characteristic oblique fold at middle. For measurements and values for ratios see Table 2.

After SILFVERBERG (1987: 22) there are two syntypes of *Ditomus capito* var. *orientalis* J. SAHLBERG 1913 in the collection of the Zoological Museum, University of Helsinki. I received one for investigation. It is a female in good condition, glued to a card, which I have designated as lectotype. For measurements and values for ratios see Table 2.

Notes about synonymies

The status of some taxa was uncertain up to now. LORENZ (1998: 364) interpreted *Dixus punctulatus* and *D. subconstrictus* as subspecies of *D. eremita* (for *D. subconstrictus* see under *D. moloch*), whereas *D. curtangulus* was already mentioned as synonym to *eremita*. The taxon *Ditomus capito* var. *orientalis* was mentioned as subspecies of *D. obscurus* DEJEAN 1825. After having seen a large amount of material of *D. eremita* from its whole known range, it was possible to evaluate the degree of the variability of characters. The investigation of all types mentioned above satisfy me that all these specimens, which could additionally compared with the holotype of *D. eremita*, are conspecific (formal synonymization of *Aristus punctulatus*, *Ditomus capito* var. *orientalis* and *Ditomus tanaiticus* with *Ditomus eremita* in CATPAL: WRASE 2003b: 24).

The re-examination of the types of *Aristus curtangulus* confirmed the correct assignment in LORENZ (l. c.).

PIOCHARD (1873: 21), who has seen the types, has already considered *Ditomus nitidulus* DEJEAN and *Aristus perforatus* REICHE & SAULCY as synonyms to *eremita*. Furthermore, he also synonymized, judging from the description, *Ditomus talpa* REDTENBACHER with *eremita*. *Ditomus megacephalus* WALTL is a long-accepted synonym to *D. eremita*. Therefore, it seemed me unnecessary to check the types of these taxa.

Note

SCHAUBERGER (1934: 147) in the meaning, that the populations of *D. eremita* (DEJEAN) from Middle Asia would form a subspecies, expressed his doubts, if the taxon *dsungaricus* STICHEL 1925 belongs as name of a subspecies actually to *Dixus semicylindricus*

(PIOCHARD) and did not exclude the possibility that it could belong to *D. eremita*. In the case, that the assignment of Stichel would be right, he proposed conditionally the name *turkestanicus* for a subspecies of *D. eremita*. According to ICZN, 1999, Art. 15.1 the name *turkestanicus* is not available.

Dixus semicylindricus (PIOCHARD de la BRÜLERIE 1872)

Aristus semicylindricus PIOCHARD DE LA BRÜLERIE 1872: 476 (loc. typ.: "Erzeroum, Bitlis, Van")

Aristus tenuesculptus SOLSKY 1874: 47 (loc. typ.: "Ad Maracandam [Samarkand] et in alliis locis vallis Sarafschan" [Uzbekistan/Tadzhikistan]).

Aristus lucidus REITTER 1900: 47 (loc. typ.: "Araxesthal").

Ditomus semicylindricus ssp. *dsungaricus* STICHEL 1923: 99 [Replacement name for *orientalissimus* STICHEL] (loc. typ.: "Tarbagatai in der Dsungarei" [Kazakhstan]).

Ditomus semicylindricus ssp. *orientalissimus* STICHEL 1923: 50 (loc. typ.: "Tarbagatai in der Dsungarei").

Ditomus semicylindricus ssp. *persianus* STICHEL 1923: 50 (loc. typ.: "Sultanabad" [Arak, Iran]).

Type material

Aristus lucidus REITTER (TMB): Lectotype ♂, herewith designated, labelled: "Caucasus Araxesthal Leder. Reitter." (black print, black margined on white label); "coll. Reitter" (black print on white label). 4 paralectotypes (2♂, 2♀): "Taschkent" (hand written in black by Reitter on white label); "coll. Reitter" (black print on white label). 2 paralectotypes (1♂, 1♀): "Taschkent. Leder. Reitter." (black print on white label, black margined); "938/4" (hand written in black on white label). 1 paralectotype ♂: "Bergwüste Afgan. Grenze" (hand written in black by Reitter on white label); "coll. Reitter" (black print on white label). 2 paralectotypes (1♂, 1♀): "Bergwüste Afghanistan (written by hand on white label, subsequently added); "coll. Reitter" (black print on white label). 1 paralectotype ♂: "Turkmenia Leder. Reitter" (black print on white label, black margined); "coll. Reitter" (black print on white label). The lectotype with a label subsequently added: "Holotypus 1899 Aristus lucidus Reitter" (red print, red margined on white label, species and author's name written by an unknown hand), the paralectotypes with the same kind of label, but instead of "Holotypus" with "Paratypus". Additional labels added stating (lectotype): "Lectotype Aristus lucidus Reitter, 1900 Wräse design. 2002"; paralectotypes: "Paralectotype Aristus lucidus Reitter, 1900 Wräse design. 2002" (black print on red label); all specimens with additional labels added stating: "Dixus semicylindricus (Piochard in Gilnický, 1872) Wräse det. 2002" (black print on white label).

Ditomus semicylindricus ssp. *dsungaricus* STICHEL (coll. HEYDEN in DEI): Holotype ♂, labelled: "Sibirien Tarbagatai Haberhauer 77" (black print on white label, black margined); "Ribbe"; "304" (hand written in black on white label); "Ditomus semicylindricus orientalissimus det. W Stichel jr" (species name hand written in black by Stichel, remainder black print on white label); "A. semicylindricus Brullé" (hand written in black, obviously subsequently added). Additional labels added stating: HOLOTYPE *Ditomus semicylindricus* ssp. *dsungaricus* Stichel, 1925 Wräse labelled 2002" (black print on red label); "Dixus semicylindricus (Piochard in Gilnický, 1872) Wräse det. 2002" (black print on white label).

Ditomus semicylindricus ssp. *persianus* STICHEL (MNHUB): Lectotype ♂, herewith designated, labelled: "F. Ullrich 222" (black print on white label, black margined, number hand written in black); "Persien Sultanabad" (black printed on white label); "Type" (black print on red label); "Dit. semicyl. persianus det. W Stichel jr". 2 paralectotypes ♀: "F. Ullrich 222." (black print on white label, black margined, number hand written in black); "Persien Sultanabad" (black print on white label); "D. semicyl. persianus det. W Stichel jr" (species name hand written in black by Stichel on white label, remainder black print). Additional labels added stating (lectotype): "LECTOTYPE *Ditomus semicylindricus* ssp. *persianus* Stichel, 1925, Wräse design. 2002"; paralectotypes: "PARALECTOTYPE *Ditomus semicylindricus* ssp. *persianus* Stichel, 1925, Wräse design. 2002" (black print on red label); all specimens with labels: "Dixus semicylindricus (Piochard in Gilnický, 1872) Wräse det. 2002" (black print on white label).

Other material examined

More than 320 specimens from Azerbaijan, Armenia, Russia, Turkey, Iran, Iraq, Kirghizstan, Kazakhstan, Uzbekistan, Tadzhikistan, Turkmenistan, Afghanistan, China, Pakistan and India.

C h i n a : Xinjiang: Tienshan, Uromqi, 70 km Mouxia, 2000-3000 m, 16.-21.VII.1991, Snižek leg. (1 ex., cWR). "Tien-Schan, westliche Täler des Tekestales [Tekes He], 1902, S.G.Wache" (13 exs., MNHUB). "O. Turkestan, Kuldscha [Yining]" (1 ex., MNHUB). Borohoro Shan, Jining, Ining-H-Sien, 44.06N/81.56E, 26.31.VII.1991, M. Snižek leg. (1 ex., cWR).

A f g h a n i s t a n : Ghazni: Ghazni, NW Mogur, 3000 m, 28.V.1973, Kabakov leg. (1 ♀, ZIN). **Kabul**: 80 km SW Kabul, 2400 m, 1.VI.1961, Gazert leg. (1 ♀, cWR). Tshemtala, 10 km NW Kabul, 1800 m, 18.V.1974, L. Papp leg. (1 ♂, 1 ♀, cWR). - **Kunar**: Nuristan, "E Wama u. im Parun-Tal", 30.VII.1935, Expedition Dr. Scheibe (1 ♀, DEI). Nuristan, N Waygal, 2500 m, 26.VI.1972, Kabakov leg. (1 ♂, ZIN). - **Kundus**: Nuristan, SE Čapa-Dara, 1200 m, 25.V.1971, Kabakov leg. (1 ♂, ZIN).

P a k i s t a n : Chitral: Madaglasht, 2500-3700 m, 5.-7.VII.1982, Erber & Heinz leg. (8 ♂♂, 10 ♀♀, cERB, cWR).

I n d i a : Uttar Pradesh: "Sev. Inde [Northern India], UP. [Uttar Pradesh] Himalaje", VII. 1979, Lata leg. (1 ex., cWR).

Distribution

From eastern and south-eastern Anatolia, the Caucasus, the uplands of Armenia, Iran and Iraq, the plains of Kazakhstan, the Tien Shan, the Pamir, Alai and Hindukush to the western Himalaya in the east. First detailed records for Pakistan, India and China, already formally mentioned in CATPAL: WRASE 2003b: 365.

Recognition

A dark piceous, middle-sized species with appendages dark or infuscated. Head normally with frontal impression weakly developed or missing. For values of measurements and ratios see Table 1.

Pronotum dorsally flat, base normally slightly convex with somewhat obtus hind angles, acute at tip or rectilinear with hind angles rectangular or sometimes even acute-angled and directed outwards. Elytra parallel, with well developed humeri, sometimes laterally slightly convex, dorsally slightly convex. Punctuation of intervals fine and sparse, consisting normally of 1 puncture in an irregular row, sometimes mixed with smaller punctures, striae fine, weakly engraved and finely punctured, intervals flat, seldom striae deeper and intervals slightly convex. Microsculpture of the surface in females remarkable stronger developed than in males, that the surface becomes dull. Abdomen on sternite 2 to 5 or 3 to 4 with 2 small oblong tomentous spots at middle.

Median lobe in dorsal or ventral aspect relatively slender, distinctly narrowed behind middle on the left side (seen ventrally). Internal sac of the median lobe lacks any stronger chitinized structures like spines or thorns but in ventral aspect with characteristic folds of microtrichial fields. Beside 3 folds, situated apically, 2 oblique short folds (sometimes only 1 visible) in about the middle (Fig. 6). In immature specimens it can be difficult to recognize these folds. Microtrichia seem to be stronger developed in some portions than in other species. Median lobe in lateral aspect see Fig. 8.

Intraspecific and geographical variability

Concerning the intraspecific variability the same can be said for *D. semicylindricus* as in *D. eremita*, though it is more moderate in some characters. Also *D. semicylindricus* has a sexual dimorphism resulting in different characteristics of males and females, connected with allometric trends (therefore small males can have a female-like habitus). It varies in the development of frontal impressions and the puncturation can be a little stronger or can be reduced to fine punctures, the elytral intervals are flat and the stria very fine, or slightly convex with the stria more engraved. Also *D. semicylindricus* varies in body size in an astonishing kind. The largest specimen I could investigate (a male from SW Turkmenistan, lake Kovata, 10 km W Ashkhabad, cWR) has a body size of 11.1 mm, the smallest (a male from Turkey, Tatvan, cWR) just measures 5.8 mm.

I could not observe such a distinct variability in respect to the geographical distribution as in *D. eremita*. Though some specimens from Pakistan, mentioned above, have the elytra laterally slightly rounded with intervals fairly convex and with striae more strongly engraved, but there are also specimens with flat intervals and fine striae in the same series. Such specimens occur also among members of western populations. The males of the Pakistan specimens deviate in having the abdominal tomentous spots only at sternite 3 to 4, but more material is needed to state, if this difference is really constant. The single specimen from Uttar Pradesh can not be separated from specimens coming from regions situated westernwards by external features. More material from these regions could clear up this topic.

Notes about types and synonymies

Stichel's description of *Ditomus semicylindricus* ssp. *dsungaricus* was based on one specimen (a pinned male in good condition, now glued to a card), not bearing a type label, therefore I have labelled this specimen, identified by its label ("*Ditomus semicylindricus orientalissimus* det. W Stichel jr") as holotype. The description of *Ditomus semicylindricus* ssp. *persianus* STICHEL was based on a pinned male (in good condition, now glued to a card), and 2 pinned females. As no holotype was designated, I have chosen the male as lectotype and the remaining females as paralectotypes. (For values of measurements and ratios see Table 2). The features of all seen specimens of *D. semicylindricus* from its whole range including the characters of the median lobe and its internal sac let me concur with the conclusions of LORENZ (1998: 364), who has already formally synonymized the taxa mentioned here.

Reitter described *Aristus lucidus* from "Araxesthal; Turkestan: Transcaspien, Taschkend, Aghanistan" and distinguished it from *semicylindricus* mainly by a very wide head and by very enlarged temples in both sexes. I have seen all 12 specimens of the type series (partly pinned, partly glued to cards) and have chosen a male from: "Caucasus, Araxesthal" as lectotype. The investigation, taking into account the variability of external characters and the construction of the median lobe (Fig. 8), confirmed that the Piochard and Reitter names are based on specimens of one taxon. (For values of measurements and ratios see Table 2).

Dixus moloch (PIOCHARD DE LA BRÛLERIE 1873)

Aristus moloch PIOCHARD DE LA BRÛLERIE 1873: 26 (type locality: "Djebel-ech-Cheik, .. près du village Hibbaryeh" [Jabalash Shaykh Mts. = Antilibanon Mountains, Syria]).

Aristus subconstrictus REITTER 1900: 47 (type locality: "Kurdistan, Mardin" [Turkey]).

Type material

Aristus moloch PIOCHARD de la BRÜLERIE (Coll. Piochard/Coll. Chaudoir in MNHP): Lectotype ♂, 3 paralectotypes ♀♀ (Coll. Piochard in MNHP, herewith designated), labelled: "Dj. Cheik" (handwritten in black by Piochard on small green labels); 1 paralectotype ♂ (Coll. Chaudoir in MNHP), labelled as same and with label "Ex Musæo Chaudoir" (red print, red margined on white label). Additional labels added stating (lectotype): "LECTOTYPE Aristus moloch Piochard, 1873 Wrase des. 2002"; paralectotypes: PARALECTOTYPE Aristus moloch Piochard, 1873 Wrase des. 2002" (red print on white label); all specimens with added label stating: "Dixus moloch (Piochard, 1873) Wrase det. 2002" (black print on white label).

Aristus subconstrictus REITTER (TMB): Holotype ♂, labelled: "Mardin"; "subconstrictus m. 1899", handwritten in black by Reitter on white labels and with an additional label subsequently added: "Holotypus 1899, Aristus subconstrictus Reitter" (red print, red margined on white label, species and author's name written by unknown hand). Additional label added stating: "Dixus moloch (Piochard, 1873) Wrase det. 2002" (black print on white label).

Other material examined (104 exs.)

I r a n : Āzarbāyğān-e Garbī: Serou, 50 km NW Orūmīye, 37.49N/44.45E, 9.VI.1999, P. Kabátek leg. (3 exs., cWR). Same data but: E.&P.Hajdaj leg. (1 ex., cHAJ).

I s r a e l : N-Golan Hights, Mt. Hermon, W Mas'ada, 850 m, 28.IV.1996, P.H. Schnitter leg. (11 exs., cSCHN, cWR). N-Golan Hights, Mt. Hermon, Mas'ada, forest, 850 m, 4.V.1996, Schnitter & Staven leg. (13 exs., cSCHN). N-Golan Hights, Mt. Hermon, Majdal Shams, 1180 m, 3.V.1996, Schnitter & Staven leg. (2 exs., cSCHN).

S y r i a : Homs: W Horns, Krak de Chevaliers, 25.V.1998, E. & P. Hajdaj leg. (7 exs., cHAJ, cWR).

T u r k e y : Adana: Hasanbeyli env., 1150 m, 4.VI.1992, S. Kadlec leg. (3 exs., cWR). Hasanbeyli, S Bahçe, 31.V.1998, E. & P. Hajdaj leg. (1 ex., cHAJ). Hasanbeyli, 26.V.1995, M. Kebert leg. (1 ex., cPROUZ). Gülek-Tarsus, 20.V.1989, E. Jiroux leg. (1 ex., cWR). Namrunkale [=Çamlıhayla], 29.V.1995, Rybárek leg. (1 ex., cPROUZ). - Adiyaman: Kuyucak, 8.VI.1996, M. Snížek leg. (2 exs., cWR). - Diyarbakır: 15 km NW Lice, südliche Inceberun Dağları, Quercus 50%, 17.V.1990, A. Schulz leg. (1 ex., cWR). - Gaziantep: Gaziantep, A.v.d.Trappen leg. ("Aintap", 1 ex., SMNS). Gaziantep ("Aintap", 1 ex., TMB). - İçel: Aidiniar, 25 km NW Erdemli, 21.VI.2003, E. & P. Hajdaj leg (3 exs., cHAJ, cWR). Arslanköy, 1300 m, 2.V.2001, M. Egger leg. (2 exs., cEGG, cWR). 20 km N Aydıncık, 36°09'44"N/32°27'44"E, 19.V.2002, A. Skale leg. (2 exs., NKME, cWR). Aydinlar, 9.VII.1993, J. Hájek leg. (1 ex., cWR). Aydinlar, 30 km N Erdemli, 1000 m, 6.V.1996, J. Bašta leg (10 exs., cBAS, cWR). Erdemli env., Güzeloluk-Aydınlar, 8./9.VII.1993, P. Bulirsch leg. (1 ex., cWR). Güzeloluk, 1200-1400 m, 11./12.VI.1996, Z. Malinka leg. (1 ex., cMAL). Güzeloluk, 1400 m, 28.IV.2001, M. Egger leg. (1 ex., cEGG). Erdemli-Aslanlı, Toros Dağları, 1100 m, 23.-28.VI.1997, P. Kabátek leg. (1 ex., cWR). Erdemli env., 8 km NW Arslanlı, 24.V.1998, V. Kubík leg. (1 ex., cPROUZ). 10 km S Kazancı, 1300 m, A. Schulz, K. Vock & M. Sanetra leg. (1 ex., cWR). Sartavul, 30.IV.1996, V. Kožel leg. (1 ex., cRES). 25 km NW İçel, 1 km NW Yeniköy, 37°00'17"N/34°26'57"E, 1200 m, 21.V.2002, A. Skale leg. (1 ex., NKME). - Konya: Beyşehir lake, 30.V.1995, T. Kopecký leg. (1 ex., cKOP). Beyşehir env., Yeşildağ, 30.V.1995, J. Mertlik leg. (3 exs., cBUL, cPROUZ). Seydişehir env., 28.IV.2001, I. Smatana leg. (5 exs., cWR); Seydişehir env., 5./6.VI.2003, R. Lohaj leg. (2 exs., cLOH, cWR). - Muğla: Kale Tepe, 25.IV.1992, Kinzelbach leg. (2 exs., SMNS). - Nevşehir: Ürgüp, vallon de Balkan Deresi, Cappadoce, 19.V.1989, E. Jiroux leg. (1 ex., cWR).

J o r d a n : Al-Karak: Lahitha (S At-Tafilah), ca. 1400 m, 18./21.IV.1998, W. Heinz leg. (2 exs., cHZ). - Maān: Shaubak [Ash-Shawbak], ca. 1500 m, 25./26.IV.1998, W. Heinz leg. (12 exs., cHZ, cWR). - Irbid: Sakhra (NW Jarash), ca. 1100 m, 16.IV.1998, W. Heinz leg. (1 ex., cHZ).

Distribution

From southern and south-eastern Anatolia, Iran, Syria, Lebanon and Israel to Jordan. *D. moloch* is a species not well-known and is rare in collections, its complete range was unknown until today. First detailed records for Iran and Jordan, already formally mentioned in CATPAL: WRASE 2003b: 365.

Recognition

A dark piceous, middle-sized species with appendages dark, or, in rare cases, with legs reddish piceous. Head normally with frontal impression weakly developed or missing. Eyes smaller but more protruding in comparison with *D. eremita* and *semicylindricus*, hairs on elytra longer. For values of measurements and ratios see Table 1. Habitus see Fig. 27.

Pronotum dorsally slightly convex, base normally slightly convex with somewhat obtuse hind angles, acute at tip, or rectilinear with hind angles rectangular or sometimes even acute-angled and directed outwards, acute at tip.

Elytra laterally convex, widest behind the middle with well developed humeri, dorsally convex. Intervals convex, striae strongly engraved, punctation strong and dense, consisting normally of 1 to 2 punctures in an irregular row, sometimes mixed with smaller punctures. Abdomen on sternite 3 to 5 with 2 small oblong tomentous spots at middle.

Microsculpture of the surface in females is remarkably more strongly developed than in males, surface dull.

Median lobe (Figs 9, 10) in dorsal or ventral aspect relatively wide, only slightly narrowed apicad, ventrally seen. Internal sac of the median lobe lacks any stronger chitinized structures like spines or thorns, but with characteristic folds of microtrichial fields.

Intraspecific and geographical variability

Intraspecific variability and sexual dimorphism not as striking as in the two previously mentioned species. The elytral puncturation can somewhat differ in intensity and separation of punctures, the form of the hindangle can vary, as mentioned above. The tendency of big males to develop a big head and a very wide pronotum is low, I saw only one of such specimens among the material mentioned above. Any variability in respect to the geographical distribution could not be recognized, surely due to the relatively restricted range, compared with *D. eremita* and *semicylindricus*.

Notes about types and synonymies

The description of *Ditomus moloch* was based on specimens, collected by Piochard himself "au nombre d'un douzaine...sur le pentes du Djebel-ech-Cheik...au mois de mai, sous les pierres, dans un bois ombreux, près du village de Hibbaryeh, à une altitude d'environ 1,000 m." I found in the Piochard Collection (in MNHP) four pinned syntypes (identified by their labels "Dj. Cheik") and have chosen a male as lectotype and the three remaining females as paralectotypes. Additionally, I could discover in the Chaudoir Collection (in MNHP) a further male of the same series designated now as the fourth paralectotype. For measurements and values of ratios see Table 2.

Reitter has described *Aristus subconstrictus*, basing on one specimen, in an identification key, and he remarked some lines before, that he would not know *moloch*. The investigation of the holotype revealed, that it deals with a pinned male (now glued to a card and in good condition – only the right last 4 antennomeres are missing) of reddish brown colour (obviously not completely mature) with frontal impressions weakly developed, with the base of pronotum slightly concave and with obtuse hind angles. It agrees in all characters with specimens of *D. moloch*, that the synonymy was established with confidence (CATPAL, WRASE 2003b: 24). For measurements and values of ratios see Table 2.

***Dixus capito* (AUDINET-SERVILLE 1821)**

Aristus capito AUDINET-SERVILLE 1821: 21 (type locality: "Du Midi" [de la France]).

Aristus haagii HEYDEN 1870: 59 (type locality: "Minas de Esploradora Sierrae Nevadae", Spain),
Aristus capito v. obscuroides PAULINO D'OLIVEIRA 1876: 46 (type locality: "Leiria", Portugal).

Type material

Aristus haagii HEYDEN (Coll. Heyden in DEI): Lectotype ♂, herewith designated, labelled: "Esploradora Sr. Nevada Heyden", 1 paralecotype ♂, 1 paralecotype ♀: "Esploradora Heyden" (all hand written in black on small white labels by Heyden); the ♀ with hand written additional label: "A. capito var. Haagi Heyd." (subsequently added), all specimens with red label, black printed: "Syn-typus" (subsequently added). Additional labels added stating (lectotype): "LECTOTYPE Aristus haagii Heyden, 1870, Wrase des. 2003"; paralecotypes: PARALECOTYPE Aristus haagii Heyden, 1870, Wrase des. 2003" (black print on red label); all specimens with additional label added stating: "Dixus capito (Audinet-Serville, 1821) Wrase det. 2003" (black print on white label).

Other material examined (136 exs.)

S p a i n : "Hispania"; "Hisp."; "Spanien"; "Andalusien"; "Andalus." or "Andal." (12 exs., DEI, MNHUB). - Albacete: Lag. Acequión, 2.VI.1986, J. Vives leg. (2 exs., cWR). - Ávila: E. Sierra de Gredos, 5 km SW El Tiemblo, 800 m (pine forest), 3.III.1999, Wrase leg. (1 ex., cWR). - Badajoz: Barcarrota, Rio Alcarrache, 400 m, 20.VI.1985, J.P. Zaballos leg. (3 exs., cWR). - Barcelona: Barcelona, Himighof leg. (1 ex., cHEYD). Terrassa, 28.V.1977 (3 exs.), 5.VI.1977 (3 exs.), 19.VI.1977 (1 ex.), J. Vives leg. (cWR). - Cuenca: Cuenca, "D. Marl. y Saez" leg. (3 exs., MNHUB). - Granada: Granada, 2.VI.1935, Feige leg. (1 ex., MNHUB). Sierra Nevada (1 ex., DEI). "S. Nevada, v. Heyden", "Coll. Stern" (1 ex., DEI). "Sierra Nevada", "Coll. Stierlin" (1 ex., DEI). Sierra Nevada, Güéjar-Sierra, Camino de Lomas Cunas de los Cuartos, 1900-2100 m, 14.VI.1991, Wrase leg. (13 exs., cWR). - Jaén: Mengíbar, Las Infantas, 14.VI.1991, Wrase leg. (1 ex., cWR). - León: Ponferrada, Paganetti leg. (5 exs., DEI). - Málaga: Ronda (1 ex., DEI). Sierra de las Cabras, Puerto de las Pedriza, Villanueva de Cauche, 800 m, 27.V.1991, Wrase leg. (1 ex., cWR). - Palencia: Palencia, Paganetti leg. (4 exs., DEI, MNHUB). - Sevilla: Aznalcázar, 14.VI.1982, Espanol leg. (1 ex., MNHUB). - Teruel: Umg. Albarracín, 1200 m, VI-VII.1925, H. Wagner leg. (3 exs., MNHUB). - Zaragoza: Zaragoza, 1918-1919, E. Conrad leg. (1 ex., DEI).

P o r t u g a l : "Lusitania, Meyer" and "Lusitania, Deyrolle" (2 exs., cHEYD); "Lusitania" (1 ex., MNHUB). - Lisboa: Lisboa, Simrot leg. ("Lissabon", 1 ex., MNHUB).

F r a n c e : "Gallia mer." or Gall. mer." (5 exs., DEI, MNHUB). - Aude: Narbonne-Plage, 20 m, VI 1995, U. Schaffrath (2 exs., cSCH, cWR). - Bouches-du-Rhône: "Marseille Dejean" (1 ex., MNHUB). Alpilles, 1.-15.VII.1984 (1 ex., SMNS).

I t a l y : "Etrur. Rossi" (1 ex., MNHUB). - Sardinia: "Sardin." (1 ex., MNHUB). - Sicilia: "Sicilia" (1 ex., DEI).

A l g e r i a : "Algérie" (1 ex., DEI). - Al-Jazā'ir: Al-Jazā'ir, coll. Thieme ("Algier", 3 exs., MNHUB); Al-Jaza'ir, Gutheil leg. ("Algier", 3 exs., MNHUB). Azflūn, Ancey leg. ("Azeffoun, Kabylia", 4 exs., cHEYD). Dara al Mizān, Ancey leg. (1 ex., cHEYD). - Bātnah: Bātnah, Schaposchnikoff leg. ("Batna", 1 ex., MNHUB); Bātnah, 17.V.1896, W. Horn leg. ("Batna", 8 exs., DEI). Taboult-Lambèse, 5.VI.1908, W. Liebmann leg. ("Lambèse", 1 ex., DEI); Taboult-Lambèse, Schaposchnikoff leg. ("Lambessa", 1 ex., MNHUB). Tīlmkāt, Schaposchnikoff leg. ("Timgat", 1 ex., MNHUB). Bātnah-Qustantīn, ("Batna-Konstantin", 5 exs., MNHUB). - Midyah: Bulaydah, VII-VIII 1887 ("Blidah", 1 ex., MNHUB). Midyah, 1884, Kobelt leg. ("Médéah", 1 ex., cHEYD). - Qustantīn: Qustantīn, 1884, Kobelt leg. ("Constantine", 3 exs., cHEYD). - Tīlimsān: Tīlimsān, 1884, Kobelt leg. ("Tlemcen", 1 ex., cHEYD). - Wahrān: Wahrān ("Oran", 1 ex., DEI); Wahrān, Leder leg. ("Oran", 3 exs., MNHUB).

M o r o c c o : "SW-W-Moyen Atlas", IV 1985, ex coll. F. Bajet " (2 exs., cWR). - Ifra: Moyen Atlas, Fôret de Cèdres, 6 km S Azrou, ca 1800 m, (under stones/moss), N43°03.950'/W005°58.839', 19.II.2004 Th. Aßmann leg. (15 exs., cASM, cWR).

C o u n t r y n o t d e t e r m i n e d : "Maillot. Michelet W. Horn leg." (1 ex., DEI).

Distribution

Iberian Peninsula, southern France, northern Africa (Algeria, Tunisia: BEDEL 1897: 120, Morocco: ANTOINE 1959: 352). Old records from Italy and Sicily (BEDEL 1897: 120). MAGISTRETTI (1965: 269) referred to the catalogue of RAGUSA (1883), where the species was recorded from Sicily (Agrigento) and he mentioned the record of Paganetti-Hummel (i.lit.) from Calabria (Antonimia). Obviously there are no new findings and its occurrence today in Italy is mentioned as questionable by VIGNA TAGLIANTI 1993: 37.

Recognition

A blackish, large species with appendages dark, tarsi sometimes a little lighter. Head normally with frontal impressions weakly developed, only suggested or missing, in rare cases distinctly developed. For values of measurements and ratios see Table 1.

Pronotum dorsally slightly convex, base normally rectilinear or slightly convex with hind angles acute at tip, mostly acute-angled and directed outwards or more or less rectangular.

Elytra almost parallel-sided with well developed humeri, widest at or a little behind the middle, dorsally convex. Intervals moderately convex, seldom almost flat, striae distinctly engraved. Punctuation strong and dense, on elytra consisting normally of 2 to 3 punctures in an irregular row. Abdomen without tomentous spots.

Microsculpture of the surface in both sexes weakly developed, therefore surface fairly shiny.

Median lobe (Figs 11, 12) in dorsal or ventral aspect relatively wide, only slightly narrowed apicad. Internal sac of the median lobe lacks any stronger chitinized structures like spines or thorns but with characteristic folds of microtrichial fields.

D. capito is similar in size and general habitus to *D. klapperichi* JEDLICKA, but differs by possessing a less excavated labrum and stronger and denser puncturation of pronotum and elytra. The pronotal base is narrower and the pronotal hind angles are of "normal form" (see above) contrary to the very striking wing-like hind angles of *D. klapperichi*. Additionally there are differences in the structure of the median lobe and its internal sac.

Intraspecific and geographical variability

Intraspecific variability not as striking as in *D. eremita* and *semicylindricus*. There is a small variability in development of the frontal impressions and the strength and separation of puncturation of the surface. The form of the hind angles of the pronotum can vary, as mentioned above. The sexual dimorphism is well developed. The tendency for big males to have a big head and a very wide pronotum is distinct, the females have a smaller head and a less transverse pronotum than the males. Variability concerning body size is normal and variability concerning geographical distribution not very distinct. It seems, that individuals from southern Spanish and northern African populations show the tendency to have the hind angles more acute and directed outwards than specimens from other regions, but there are numerous exceptions and no constant differences.

Notes about types and synonymies

The description of *Aristus capito* does not indicate if it was based on one or more speci-

mens, which came from "de Midi" of France. As all authors have interpreted the species in the same sense, I have not attempted to check the type(s). This can be said also for the typical material of *Aristus capito* v. *obscuroides*, which was described from Leiria in Portugal and was already considered to be a synonym to *capito* by SCHAUBERGER (1934: 114). Heyden in the description of his *Aristus haagii* differentiated it from *capito* beside other characters mainly by the almost larger head, finer pilosity, less dense puncturation of the surface and deviating fore angles of the pronotum. In the Heyden Collection (stored in the DEI) are three pinned syntypes (now glued to cards) of *Aristus haagii* (identified by their labels "Esploradora Sr. Nevada Heyden" and "Esploradora Heyden") and I have chosen a male as lectotype and the two remaining specimens (male and female) as paralectotypes (for measurements and values of indices see Table 2). The specimens are in good condition, though part of the appendages are missing. There is a specimen with the label "S. Nevada v. Heyden" (not written by Heyden) and "Coll. Stem" in the DEI General Collection, which could come from the same series the description was based on, but probably it was given away before the description was made, therefore it was not regarded as a syntype. Heyden in his description mentioned also one specimen from Alicante and two from Cartagena, which could not be found in the Heyden and the DEI General Collection. SCHAUBERGER (l.c.) considered *haagi* a subspecies of *D. capito* from southern Spain and western north Africa and also ZABALLOS & JEANNE (1994: 97) reserved the same status for *haagi*. Later LORENZ (1998: 364) synonymized it formally with *D. capito*. The comparison of the typical material of *Aristus haagi* with other numerous specimens of *D. capito* from other regions of its range revealed, that all differences given in the descriptions of *obscuroides* and *haagi* and also mentioned by SCHAUBERGER (l.c.) refer to the normal variability in *capito* and confirmed also the justified synonymisation by LORENZ (l.c.).

Dixus klapperichi (JEDLIČKA 1964)

Ditomus klapperichi JEDLIČKA 1964: 285 (type locality: "Oase Azrak" [Azraq Ash Shishan, Jordan]).

Type material

Paratype ♂ (TMB) labelled: "O. Jordan. J. Klapperich"; "Oase Azrak 500 m, 16.5.56" (black print on white label); "Ditomus Klapperichi sp.n. det. Ing. JEDLIČKA" (species name handwritten in black by Jedlička, the rest printed in black on dark pink label); "Allotypus" (black print on dark pink label), and with an additional label subsequently added: "Allotypus Ditomus Klapperichi Jedlička" (red printed and red margined on white label, species and author name handwritten). Paratype ♀, labelled: "O. Jordan. J. Klapperich"; "Fuhes, N. Amman, 1000 m, 27.4.58" (black print on white label); "Ditomus Klapperichi sp.n. det. Ing. JEDLIČKA" (species name handwritten in black by Jedlička, the rest black print on dark pink label); "Paratypus" (black print on dark pink label), and with an additional label subsequently added: "Paratypus Ditomus Klapperichi Jedlička" (red printed and red margined on white label, species and author name handwritten). Both specimens with additional label added stating: "Dixus klapperichi (Jedlička, 1964) Wrase det. 2002" (black print on white label).

Other material examined (2 exs.)

Jordan: Amman: "O. Jordan. J. Klapperich"; "Amman 800 m 13.3.1957." (1♂, cWR); "O. Jordan. J. Klapperich"; "Amman 800 m 12.5.1957." (1♂, TMB).

Distribution

Up to now only known from some localities in Jordan.

Recognition

A dark piceous, large species with dark appendages. Head with frons somewhat uneven and with frontal impression weakly or moderately developed. For values of measurements and ratios see Table 1. Habitus see Fig. 26.

Pronotum (Fig. 26) dorsally slightly convex, base very wide, almost rectilinear. Hind angles large, wing-like, obtuse, more or less acute or somewhat rounded at tip, distinctly deflected upwards and slightly directed backwards, lateral margin slightly curved. Lateral gutter of pronotum remarkable wide. Elytra more or less parallel-sided with humeri well developed, widest at about the middle, dorsally convex. Intervals flat, striae weakly impressed, puncturation strong and dense, consisting of about 2 punctures in an irregular row. Abdominal sternites without small groups of tomentous hairs in males.

Microsculpture of the surface in females a little stronger developed than in males.

Median lobe (Figs 13, 14) in dorsal or ventral aspect relatively wide, only slightly narrowed apicad. Internal sac of the median lobe lacks any stronger chitinized structures like spines or teeth, but with characteristic folds of microtrichial fields.

D. klapperichi resembles *D. capito* in size and general habitus, but is different in possessing a more excavated labrum and sparser puncturation of pronotum and elytra. The pronotal base is broader and the hind angles are very large and wing-like. Additionally there are differences in the construction of the median lobe and its internal sac.

Intraspecific and geographical variability

Due to the fact, that only four specimens were available for this study I cannot make a clear statement on this topic. The elytral puncturation is a little sparser in one specimen and the hind angle of the pronotum is not so acute at tip in another one.

Notes about types

Jedlička mentioned in the description seven specimens, but recorded only five specimens under the type material a little later in the text. The paratypes mentioned above are in good condition, they were originally pinned and are now glued to cards. The holotype is in the Collection Klapperich, which is now housed in the ZFMK and was not investigated. The supplementary specimens which I could investigate come from the same series, Klapperich collected in Jordan. Obviously Jedlička has not seen them, as they are not labelled as types. I received these two specimens among other undetermined material for identification some years ago and have them re-examined now.

Subtribe Harpalina

Genus *Acinopus* DEJEAN 1821

Acinopus (Oedematicus) khalisensis ALI 1967

Acinopus (Oedematicus) khalisensis ALI 1967: 14 (loc. typ.: "Khalis" [Al-Khalis, north-east of Baghdād]), syn. novum ad *Acinopus (Oedematicus) megacephalus* (ROSSI 1794: 102).

Type material (BMNH)

Holotype ♂, labelled: "Type" (black print on white disk shaped label, red margined, followed by a round cork disk); "KHALIS May 31/1959"; "Brit. Mus. 1964-476" (black hand writing on white labels); "Acinopus (Oedematicus) mesopotamica n.sp. ♂ TYPE Det. H.A. Ali 1963 (black hand writing on white label, "DET. H.A. Ali 1963" (black print); "WRONGLY LABELLED This is the Holotype of A. (O.) khalisensis" (black print on white label, subsequently added). Additional label added stating: "Acinopus (Oedematicus) megacephalus (Rossi) Wrase det. 2004" (black print on white label).

Notes about types and synonymy

The description was based on four specimens (one male, three females). I saw the male holotype, it is pinned and in good condition, the left antenna has only three antennomeres, the right one only four. The median lobe was extracted and preserved in a small vial, pinned separately.

ALI (1967) compared his species with *A. megacephalus*, occurring in the same locality and distinguished it by its red colour, smooth head and smaller size. *A. megacephalus* should have a bigger head in males, wider than the pronotum, the clypeus should be deeply emarginate exposing the basal membrane. The holotype of *A. khalisenis* is a middle-sized specimen of 16.4 mm (in the description the size is given with 16.53 mm, a discrepancy probably due to different methods of measuring), and of dark piceous colour, not red, as mentioned in the description (the underside a little lighter, it is assumed the specimen is not completely mature). Comparison with numerous specimens of *A. megacephalus* including the form of the median lobes and their internal sacs revealed that there are no differences to the latter species. It is also known that in members of some genera of Ditomina and Harpalina there is a considerable variability connected with allometric trends. In *A. megacephalus* the body size is from about 14.5 to about 18.8 mm, only bigger male specimens have the head enlarged and wider than the pronotum, so this character is clearly intrapopulational and does not warrant retention of specific rank for *A. khalisenis*.

Genus *Nesarpalus* BEDEL 1897

Nesarpalus BEDEL 1897 (1897: 111, description in key to genera, 1898: 128, formal description).

Bedel designated for his new genus as type species "Harpalus vividus † Dej. (nec Fabr.) = gregarius Fauvel". DEJEAN (1829: 332) gave a redescription of a species, which he received "par M. Gyllenhal, comme venant de l'île de Madère, et comme le *Carabus Vividus* de Fabricius." Under the latin diagnosis at the head there is a reference to "*Carabus Vividus*. Fabr. Sys. el. 1. p. 194. n° 132." The true *Carabus vividus* FABRICIUS 1801: 194, refers to the species today known as *Calathus vividus*. Therefore the name *Harpalus vividus* DEJEAN was unavailable (ICZN, 1999, Art. 49). FAUVEL (1897: 47), had already realized this fact and introduced *gregarius* as a replacement name, his nomenclatorial act is connected with an advice on the name "vividus Dej. Wollaston (non F.)" and is accepted as indication in the sense of the ICZN, 1999, Art. 12.2 (bibliographic reference). COCKERELL (1922: 25) introduced the name *cimensis* as name for a subspecies from the Ilheo de Cima (which belongs to Porto Santo) of a species believed to be *Harpalus gregarius*, it forms an species of its own (*Nesarpalus cimensis cimensis*). *Nesarpalus atlanticus* SCHAUBERGER 1927: 8, described from Porto Santo, later seen by that author (SCHAUBERGER 1932: 61) as subspecies of *Nesarpalus sanctaerucis*

(WOLLASTON 1864), is a synonym to *Nesarpalus cimensis cimensis*. The name *maderae* SCHAUBERGER 1932: 61, introduced as name for a subspecies of *Nesarpalus sanctaerucis* and based on specimens from the Madeiran main island, belongs as name for a subspecies to *cimensis*. Type species of *Nesarpalus* BEDEL 1897 is *Harpalus gregarius* FAUVEL 1897.

B. Kataev (i. lit.) has investigated the specimen, Dejean had under eyes and which is the holotype of *Harpalus gregarius* FAUVEL (housed in MNHP) and stated that it deals with the species with several lateral pronotal setigerous pores, contrary to that, *N. cimensis* has only one, judging from the description.

Most authors have neglected (or overlooked) the description of *Harpalus cimensis* COCKERELL, but COLAS & MATEU (1958: 322) used the name for members of the population from the Deserta Grande Island as *Nesarpalus vividus* ssp. *cimensis*. A careful examination of a larger *N. cimensis* material of populations of the whole range is needed to clarify the status of all taxa concerning their taxonomic level, especially if there are really differences between the members of populations from the Madeiran main island and from the other islands for a justified separation of the taxon *maderae* as subspecies. Till then the genus is treated in the following way (as already done in CATPAL: KATAEV, WRASE & ITO 2003: 388):

Genus *Nesarpalus* BEDEL 1897 (type species *Harpalus gregarius* FAUVEL 1897)

***Nesarpalus gregarius* (FAUVEL 1897)**

replacement name for *Harpalus vividus* sensu DEJEAN 1829, non FABRICIUS 1801 (Madeira: main island)

Harpalus gregarius FAUVEL 1897: 47 (loc. typ.: "l'île de Madère").

***Nesarpalus cimensis* ssp. *cimensis* (COCKERELL 1922)**

(Madeira: Ilheo de Cima, Porto Santo, Ilhas Desertas)

Harpalus gregarius ssp. *cimensis* COCKERELL 1922: 25 (loc. typ.: "Ilheo de Cima").

Nesarpalus atlanticus SCHAUBERGER 1927: 8 (loc. typ.: "Porto Santo").

***Nesarpalus cimensis* ssp. *maderae* SCHAUBERGER 1932 (Madeira: main island)**

Nesarpalus sanctaerucis ssp. *maderae* SCHAUBERGER 1932: 61 (loc. typ.: "Madeira").

Genus *Ophonus* DEJEAN 1821

***Ophonus laticollis* MANNERHEIM 1825 (replacement name)**

Ophonus laticollis MANNERHEIM 1825: 25 (loc. typ.: "Sibiria ad Barnaul").

Carabus punctatulus DUFTSCHMID 1812: 89 (nec *C. punctatulus* FABRICIUS 1792). (loc. typ.: Austria).

Ophonus griseoides REITTER 1900: 63 (loc. typ.: "Rußland: Podolien; Galizien: Tarnopol" [Ukraine]).

LINDROTH (1986), following SILFVERBERG (1977), used the name *Ophonus nitidulus* STEPHENS 1828 as a replacement name, as the name *Carabus punctatulus* DUFTSCHMID

1812, was assumed to be a junior synonym of *Carabus punctatulus* FABRICIUS 1792 (today known as *Licinus punctatulus*). This was practiced by many workers (e.g. SCIAKY 1987). Previously, M.G. TELFER (2001: 34) has shown (basing on a personal comment of R. Booth), that Stephens equated his *nitidulus* with the *Carabus* (now *Chlaenius*) *nitidulus* of SCHRANK 1781, therefore his use of the name was a misidentification and cannot be used as a replacement name.

The next available name is *Ophonus laticollis* MANNERHEIM 1825, described from Siberia ("Habitat in Sibiria ad Barnaul. D. Gebler."). Though this name was already used for the species, dealt with here, by ÁDÁM (1996: 34), the type was never checked before. The description fits well on the species in question, but to be completely sure, I asked Ole Biström of the Zoological Museum in Helsinki, where the Mannerheim Collection is stored, for investigation of the type specimen. I repeat here his answer:

1. The ex. fits well with your description of the pronotal morphology; there is a distinct stiff hair laterally on pronotum about 1/4 from base. In comparison with additional exx. labelled *nitidulus* Stephens they seem to be conspecific.
2. Only a single ex. is placed under a label: *Ophonus Laticollis* Mannh.; specimen labelled as a female and "Gebler Barnaul." (Barnaul is a separate handwritten label).
3. Protarsus comparatively narrow, so the ex. is a female specimen.
4. The Mannerheim collection is kept separate in its original condition. Location of ex. is thus: Zoological Museum (coll. Mannerheim), University of Helsinki, Finland.

As it is now proved that *Ophonus laticollis* MANNERHEIM is identical with the species we know under the names *O. nitidulus* or *punctatulus*, the name *O. laticollis* can be used as a replacement name, as already done in CATPAL: WRASE 2003b: 390.

Ophonus (Metophonus) ophonoides (JEDLIČKA 1958)

Penthophonus ophonoides JEDLIČKA 1958: 232 (loc. typ.: "Kleinasiens").

Ophonus (Metophonus) heinziatus WRASE 1996: 655, part. (specimens from: "Elbistan [Kahraman Maras], Asm. Nurhak").

Type material

Penthophonus ophonoides JEDLIČKA (ZFMK/NMP): Holotype ♂ (ZFMK), labelled: "Asie Mineure Escalera"; "Slg. R. Oberthür (Coll. C. Martin) Eing. Nr. 4, 1956" (black print on white label); "Typus" (black print on red label, black margined); "Penthophonus ophonoides sp.n. det. Ing. Jedlička" (species name hand written in black by Jedlička, the rest black printed on dark pink label). Paratype ♀ (NMP), labelled: "Asie Mineure Escalera"; "Slg. R. Oberthür (Coll. C. Martin) Eing. Nr. 4, 1956" (black print on white label); "Mus. Nat. Pragae Inv. 66303" (black print, the number hand written, on red label); "Cotype" (black print on red label, black margined); "Penthophonus ophonoides sp.n. det. Ing. Jedlička" (species name hand written in black by Jedlička, the rest black print on dark pink label). Both specimens with added label stating: "Ophonus (Metophonus) ophonoides (Jedlička, 1958) Wrase det. 2002" (black print on white label).

Ophonus (Metophonus) heinziatus WRASE 1996: Paratypes 2♂♂ (NHMW, cWR), labelled: "Elbistan [= Kahraman Maras], Asm. Nurhak, 2000m 5.6.65, Schubert" (black print on white label); "Paratypus Ophonus (Metoph.) heinziatus spec. nov. Wrase des. 1995" (black print on red label). Both specimens with label added stating: "Ophonus (Metophonus) ophonoides (Jedlička, 1958) (= Ophonus (Metophonus) heinziatus Wrase 1996, partim Wrase det. 2002" (black print on white label).

Other material examined

T u r k e y : Içel: Namrun, [Namrunkale = Çamlıyayla], 1800 m, VI 1962, F. Schubert leg. (1♀, NHMW, labelled: "*Ophonus cribrellus* REICHE, det. Ing. JEDLIČKA").

Distribution

Although an exact locality was not given in conjunction with the description of *Pentophonus ophonoides* due to the scanty locality label, the additional material makes it likely that the type specimens were also collected in the same area. According to the specimens studied, it is a resident of the mountains in the eastern Toros Dağları and the Nurhak Dağı (and probably also the mountains between the Toros Dağları and the Nurhak Dağı).

Recognition

A middle-sized rufopiceous species with body covered with yellowish brown pubescence. Head relatively small with eyes almost hemispherical, tempora short and flat, of about half of eye diameter (viewed dorsally). Mentum with mentum tooth small, apically rounded (Fig. 22). Clypeus moderately excavated at middle. Habitus Fig. 29.

Pronotum cordate, fairly transverse, widest a little before the middle, strongly rounded anteriorly and strongly sinuate to the hind angles, with one big setigerous pore a little before the maximum width. Anterior margin moderately roundly excavated with anterior angles distinctly protruding, base slightly convex, distinctly bordered, with hind angles rectangular, somewhat blunt at tip. Basal fovea shallow, a very flat elevation between basal fovea and lateral margin. Dorsal surface moderately convex.

Elytra long-oval, widest at about the middle and dorsally weakly convex. Humeri well developed, with a small acute denticle. Intervals flat, striae weakly engraved, pore punctures arranged in 2 to 3 (in male) or 3 to 4 (in female) irregular rows.

Fore- and midtarsi in males slightly dilated (contrary to the statement in the description, that the midtarsi would be simple). Metepisterna moderately narrowed posteriad, about 1.44 times longer than wide at anterior margin (Fig. 21). Hindwings reduced to small relicts (about as long as the 2 first antennomeres), elytra not fused at suture. Outer distal margin of fore tibia produced finger-like (in male stronger than in female), with 2 spines (Fig. 19), ventroapical tubercle with 1 spine.

Puncturation on head and pronotum fairly strong, coarser than on elytra, distance of pore punctures as about their diameter and less than diameter of punctures on elytra.

Microsculpture of the surface in females a little more strongly developed than in males. For values of measurements and ratios see Table 3.

Median lobe slender, moderately arcuate (in lateral aspect), terminal lamella short, a little narrowed, viewed dorsally. Apical capitulum flat and only very weakly inclined (in lateral aspect), apically slightly rounded, horseshoe-like bordered (in dorsal aspect). Internal sac at middle with a bigger and a smaller spiny patch, consisting of middle-sized spines, basal internal sac folds rope- or belt-like.

Comparisons

O. ophonoides belongs to the *O. cordatus* group, which comprises species with a cordate pronotum, strongly sinuate before hind angles and with base bordered: *O. cordatus*

(DUFTSCHMIDT 1812), *O. castaneipennis* SCIACY 1987, *O. davatchii* MORVAN 1981 and *O. heinzianus* WRASE 1996 and it is closest to *O. heinzianus* (habitus Fig. 28). It is extraordinarily similar to this species, sharing the same habitus, the reduction of the hind wings, which are reduced to small relicts and the general structure of the median lobe (Figs 17, 18). The values for some ratios (Table 2) overlap and are not useful for discrimination. But in *O. heinzianus* the outer distal margin of fore tibia lacks the distinct finger-like process (compare Fig. 19 and Fig. 20), the elytral pubescence is longer (about one and a half times as long as in *O. ophonoides*) and the elytra are fused at suture. The terminal lamella of the median lobe of *O. heinzianus* (Figs 15, 16) is longer, a little enlarged apicad and the apical capitulum is less strongly rounded apically (viewed dorsally). In lateral view the apical capitulum is strongly inclined and appears a little drop-like enlarged. The folds of the internal sac are basally bubble-like, distinct in dorsal and in lateral view (Figs 15, 16). It seems also, that *O. ophonoides* (at least judging from the few specimens seen) is of lighter coloration (rufopiceous), whereas *O. heinzianus* is in general dark piceous.

Notes about types and synonymy

The description is based on two specimens. The male holotype is in good condition, only the last left 3 antennomeres are missing, the female paratype is without the left fore tibia and the left hind leg, the apical left 3 and the apical right 4 antennomeres are also missing. The size was given with 10 mm, but has to be corrected (See table 3). Both specimens are glued to cards.

The status of this species was uncertain until recently. SCIACY (1987) in his revision of the western Palaearctic *Ophonus*, regarding *Penthophonus* still as a subgenus of *Ophonus*, did not know this species in nature.

While describing *O. heinzianus* I did not pay attention to the description of *Penthophonus ophonoides*, not knowing, that it is actually a species belonging to *Ophonus*. Just the investigation of the types revealed the true state of affairs and the correct systematic position of this species. (The new combination was established in: CATPAL, WRASE 2003b: 24). Curiously it is not the first time that a species described as *Penthophonus* actually belongs to *Ophonus*: *Penthophonus antonowi* TSCHITSCHÉRINE 1901 is a synonym to *O. cordatus* (DUFTSCHMIDT 1812.) (See KATAEV in KRYZHANOVSKIJ et al. 1995: 152).

I had included into the type series of *O. heinzianus* also two males from: "Elbistan, Asm. Nurhak, 2000 m, 5.6.65, Schubert" (NHMW). The differences which I stated to that time seemed me to be within the intraspecific variability of *O. heinzianus*. The re-examination of these specimens and an additional one and comparision with the types of *Penthophonus ophonoides* revealed, that they belong to the latter species.

Ophonus (Metophonus) cordatus (DUFTSCHMID 1812)

Carabus cordatus DUFTSCHMID, 1812: 169 (loc. typ.: "Wien") nomen protectum.

Carabus cordatus SCOPOLI 1763: 89 (loc. typ.: "Carniola" [Krain in Slovenia]) nomen oblitum.

Scopoli's name is older than Duftschmid's, so *Carabus cordatus* DUFTSCHMID would be a junior homonym. However, *Carabus cordatus* SCOPOLI has not been used as a valid name since 1899 and *Ophonus* or *Harpalus cordatus* (DUFTSCHMID) has been used as a

valid name in more than 25 works, published by at least 10 authors, in the past 50 years (a list of those works is available on request to the author). As such, conditions of Article 23.9.1 (ICZN, 1999) are met and *Carabus cordatus* DUFTSCHMID 1812 is valid (nomen protectum) and *Carabus cordatus* SCOPOLI 1763 is invalid (nomen oblitum).

***Ophonus* (s.str.) *musayabensis* ALI 1967**

Ophonus (*Ophonus*) *musayabensis* ALI 1967: 15 (loc. typ.: "Musayab" [Al-Mousayyib, south of Baghdad]), syn. novum ad *Ophonus* (s.str.) *sabulicola* (PANZER 1796: no. 4).

Type material

Holotype ♀ (BMNH), labelled: "Type" (black print on disk shaped white label, red margined); "Musayab Summer. 1961 A. Salin"; "Brit. Mus. 1964-476" (black hand writing on white labels); "*Ophonus* (*Ophonus*) *musayabensis* n.sp. ♀ Type Det. H.A. Ali 1963 (black hand writing on white label, "DET. H.A. Ali 1963" printed). Additional label added stating: "*Ophonus* (s.str.) *sabulicola* (Panzer) Wrase det. 2004" (black print on white label).

Notes about types and synonymy

The description was based on two female specimens, the paratype came from Basra. I examined the holotype, it is pinned and in good condition, the left hind tarsus and the right hind tibia are missing. ALI (1967) compared his taxon with *O. incisus* (DEJEAN) and *O. sabulicola* and distinguished it from the latter by having the pronotum rounded at the hind angles and having fine punctures on head and pronotum. The colour of the whole body was described as reddish brown and the outer intervals as being more intensely punctate than the internal ones. It would be closest to *O. sabulicola* ssp. *inaequalis* (REITTER) and would differ by having the head and pronotum more punctured and the elytral intervals with finer punctures. The investigation of the holotype revealed, that the pronotum is laterally, before the hind angles, almost straight that the hind angles are obtuse though somewhat rounded at tip. The puncturation of the first 2 elytral intervals is somewhat sparser in the apical half. The colour of the upper surface is dark piceous, the elytra show a faint greenish metallic hue. Ali had only 2 specimens of *O. musayabensis* and thus did not recognize the complex pattern of geographical and intrapopulational variability characterizing *O. sabulicola*. Pronotal shape varies within populations throughout its range and the character state of somewhat reduced elytral puncturation ascribed to *O. musayabensis* can be observed in members of population from the eastern range (I saw such specimens from Turkey: Munzur, province Tunceli and from Israel: Benjamina Kabara). Therefore it seems justified to treat *O. musayabensis* as a junior synonym of *O. sabulicola*.

Faunistical part

Subfamily Siagoninae

Tribe Siagonini

Genus *Siagona* LATREILLE 1804

***Siagona longula* REICHE & SAULCY 1855**

T u r k e y : İçel: Mersin [İçel] env. 26.III.1998, Smrz leg. (2♀♀, cWR).

The occurrence in Turkey was recorded as questionable by CASALE & VIGNA TAGLIANTI (1999: 363) and therefore not cited in CATPAL: BAEHR 2003a: 218. First sure record for Turkey.

Subfamily A p o t o m i n a e

Tribe A p o t o m i n i

Genus *Apotomus* ILLIGER 1807

***Apotomus syriacus* JEDLIČKA 1961**

I r a n : Sistan va Baluchestan: S.E. Iran, Bahu-Kalat, 68 km S Rask, 25.44 N/61.32 E, 3.-4.IV.1973, loc. no. 147, Exp. Nat. Mus. Praha (8♂♂, 6♀♀, NMP, cWR).

P a k i s t a n : Baluchistán: "SE Balochistan, Bela", 21.-25.IV.1993, S. Bečvář leg. (1♀, cWR).

Up to now known only from Syria. For recognition see WRASE 1992. First detailed records for Iran and Pakistan (already formally mentioned in CATPAL: WRASE 2003a: 237).

Subfamily H a r p a l i n a e

Tribe C h l a e n i i n i

Genus *Chlaenius* BONELLI 1810

***Chlaenius (Dinodes) viridis* MÉNÉTRIES 1832**

G r e e c e : Fokida: Amvrakía lake near Amphilioia, 24.V.2002, L. Kašpar leg. (1 ex. cKAŠP); same labeled but: Klapka leg. (1 ex., cWR).

Recorded from the Balkans only from Montenegro (APFELBECK 1904: 156, not mentioned in CATPAL: KIRSCHENHOFER 2003: 353) and Bosnia Herzegovina (CATPAL: KIRSCHENHOFER l.c.). First record for Greece.

Tribe C y c l o s o m i n i

Subtribe C y c l o s o m i n a

Genus *Tetragonoderus* DEJEAN 1829

***Tetragonoderus* (s.str.) *intermedius* SOLSKY 1874**

I r a n : Hormozgān: Hasān Langī, 62 km E Bandar-e Abbās, 26.IV.2002, M. Rejzek leg. (1 ex., cWR).

T u r k m e n i s t a n : Amu-Darya river, Kerki env., riverside forest, 25.IV.1995, W. Dolin leg. (1 ex., cWR).

U z b e k i s t a n : Tashkent, 11.VII.1984, Wrase leg. (4 exs., cWR). Syr-Darya river, Gulistan env., 14.VII.1999, S. Zonstein leg. (5 exs., cWR).

Widely distributed in the plains of Turan and southern mountains of south-eastern Middle Asia (KRYZHANOVSKIY et al. 1995:160) and adjacent areas. JAKOBSON (1907: 392) cited "Mesopotam.; Sakasp.; Samark.; Syrdar.", so findings in Turkmenistan and Uzbekistan can be supposed to be known. In CATPAL: BOUSQUET 2003a: 357 the distribution is given, as Afghanistan, Iraq and Tadzhikistan. First record for Iran.

Tribe H a r p a l i n i

Subtribe A m b l y s t o m i n a

Genus *Amblystomus* FAUVEL 1889

Amblystomus algirinus REITTER 1887b

P o r t u g a l : Faro: Castro Marim, salt, 10./11.V.1995, Ch. Bayer & H. Winkelmann (1♂, 1♀, cWR). ♂: Determination confirmed by Cl. Jeanne, 2000).

The specimens were found north of Castro Marim on an estuary meadow overgrown with *Limonium* spec. and *Frankenia* spec. First detailed record for Europe (Portugal), already formally cited in CATPAL: JAEGER & WRASE 2003b: 360.

Amblystomus niger (HEER 1841)

A z e r b a i j a n : Yardymli, Avash, 1200-1500 m, 14.-17.VI.1996, W. Schawaller leg. (1♀, SMNS).

G e o r g i a : Tbilissi, Osero Lisi, 19.VI.-13.VIII.1988, Wrase leg. (2♂♂, 3♀♀, cWR). Mzcheta near Tbilissi, 4.-23.VI.1987, Wrase & Schülke leg. (1♀, cWR).

K a z a k h s t a n : Lake Alakol, NNE Obuchovka, (15), Salzwiesen, Schilfufer, Halbwüste (lux), 350 m, 46.17.932 N/81.21.534 E, 28./29.VI.2000, Schnitter, Kühne & Nuss leg. (17 ex., cSCHN, cWR). Ili River, NNE Taschkarasu Neftbasa (06), Dünen, Flußaue (lux), 500 m, 43.57.819 N/ 79.37.235 E, 20.-21.VI.2000, Schnitter, Kühne & Nuss leg. (2 exs., cSCHN).

U z b e k i s t a n : Kulagan Mt., 6.V.1988, M. Resl leg. (1♀, cWR).

I r a n : Čahār Mahāll-o-Bahtyārī: 50 km W Sahr-e Kord, 32.25 N/50.15 E, 2324 m, 24.VII.2004, P. Kabátek leg. (1♀, cKAB). - Fārs: Sivand NE Širāz, 30.08 N/52.55 E, 1770 m, at light, 15.VII.2004, M. Rejzek leg. (1♀, cWR).

First detailed records for Azerbaijan, Georgia, Kazakhstan and Uzbekistan (already formally cited in CATPAL: JAEGER & WRASE 2003b: 360). Not yet recorded from Armenia, but an occurrence is thought very probable. First record for Iran.

Amblystomus rectangulus REITTER 1883

A z e r b a i j a n : "Kasp.Meer-Geb., Lenkoran, 1879, Korb" (1♀, cWR).

Occuring from Italy and the Balkans to Turkey, the eastern Caucasus region and the Near East. First detailed record for Azerbaijan (already formally cited in CATPAL: JAEGER & WRASE 2003: 36).

Subtribe Anisodactylina

Genus *Diachromus* ERICHSON 1837

Diachromus germanus (LINNAEUS 1758)

R o m a n i a : Arad env., 9.V.1988, J. Leidenfrost leg. (1♀, cWR).

I r a n : Āzarbāyjan-e Garbī: 50 km E Ahar, 38.20N/47.25E, 1500 m, 23.VII.2000, E. & P. Hajdaj leg. (1♂, cWR).

CSIKI (1946: 476) and HIEKE & WRASE (1988: 113) already mentioned this species for Romania and Iran (for Romania not cited in CATPAL: ITO 2003: 362).

Genus *Progonochaetus* J. MÜLLER 1938

Progonochaetus (s.str.) *indicus* KATAEV 2002b

N e p a l : Bhairahwa, 3.IX.1980, J. Seifert leg. (2♂♂, cWR).

Described from India and there widely distributed (KATAEV 2002b: 243). First record for Nepal.

Progonochaetus (s.str.) *laevistriatus* (STURM 1818)

N e p a l : Chitwan: Chitwan National Park, 230 m, lux, 29.V.1993, J. Probst leg. (1♂, cWR). Central Nepal, Sauraha, 20.-25.V.1993, Janis Ivo leg. (1♀, cWR).

I n d i a : Meghalaya: Darugiri, Garo Hills, 450 m, 19.V.1976, Wittmer & Baroni leg. (1♂, cWR).

Described from "Ostindien", certain records for China (Yunnan) and Burma (KATAEV 2002b: 244). Confirmation of an occurrence in East India and first detailed record for Nepal (already formally cited in CATPAL: ITO 2003: 363, there further records for Iran and the Oriental region).

Genus *Scybalicus* SCHAUM 1862

Scybalicus oblongiusculus (DEJEAN 1829)

T u r k e y : Van: Kalambako, 30.VI.1986, Dittrich leg. (1♀, cWR).

Mentioned as questionable from Turkey (CASALE & VIGNA TAGLIANTI 1999: 387) and not cited in CATPAL: ITO 2003: 363. First certain record for Turkey.

Subtribe Dittomina

Genus *Carenochyrus* SOLSKY 1874

Carenochyrus titanus SOLSKY 1874

I r a n : Khorāsān: "S-Iran, 50 km S Meshed [Mashhad] (45)", 22.V.1974, Expedition Museum Vindobona, Pretzmann leg. (1♂, NHMW).

First detailed record for Iran, already formally cited in CATPAL: WRASE 2003b: 363.

Genus *Carterus* DEJEAN 1830

Carterus (s.str.) dama (P. ROSSI 1792)

R o m a n i a : "Rumunsko, Tran. Alpy [Transsilvanian Alps], 19.7.74, Brokeš lgt" (1 ♀, cWR).

Due to the insufficient label data the exact locality remains unknown, surely the specimen was not collected in the montane regions, but in the plains south- or east of the mountains. An occurrence in Romania was to be expected. First detailed record for Romania (already formally cited in CATPAL: WRASE 2003b: 363).

Carterus (s.str.) gilvipes (PIOCHARD de la BRÛLERIE 1873)

P o r t u g a l : Faro: Abuféira, 20.V.1977, Oviedo leg. (3 exs., ZIN, cWR).

First detailed record for Portugal (already formally cited in CATPAL: WRASE 2003b: 364).

Genus *Dixus* BILLBERG 1820

Dixus interruptus (FABRICIUS 1775)

I s r a e l : Negev, Meshar-Ebene, 300 m, 14.II.1987, Schawaller & Schmalfuss leg. (3 exs., SMNS, cWR).

T u r k e y : Antalya: Umg. Side, IV 1996, Umlauf leg. (2 exs., NKME, cWR).

First detailed records for Turkey and Israel (already formally cited in CATPAL: WRASE 2003b: 365). Up to now the range was believed to be restricted to the western Mediterranean region.

Genus *Eucarterus* REITTER 1900

Eucarterus sparsutus (REITTER 1898)

G r e e c e : Ahaia: 30 km SW Pátra, Metochi salt land, lux, 9.VI.2003, R. Kmeco leg. (1 ♂, 1 ♀, cKM, cWR). - Préveza: Mitikas NW Préveza, 17.VII.1998, M. Egger leg. (1 ex., cWR).

I r a n : İlam: 30 km NW İlam, 33.43 N/46.25 E, 1786 m, 7.VII.2004, at light, M. Rejcek leg. (8 exs., cWR); same data but: P. Kabátek leg. (9 exs., cKAB, cWR). - Lorestan: 25 km NNW Dorud, 33.33 N/48.53 E, 8.VII.2004, at light, M. Rejcek leg. (6 exs., cWR); same data but: P. Kabátek leg. (5 exs., cKAB, cWR). 10 km SW Dorud, 1431 m, 9.VII.2004, P. Kabátek leg. (1 ex., cWR). - Kordestan: 70 km S Sanandağ, 1612 m, 35.01N/46.57E, 6.VII.2004, P. Kabátek leg. (1 ex., cKAB).

Distributed in the Near East, the Caucasus, the Crimea and the Balkans, from there up to now only known from Bulgaria. First detailed record for Greece (already formally cited in CATPAL: WRASE 2003b: 366). First records for Iran.

Genus *Penthus* CHAUDOIR 1843

Penthus tenebrioides (WALTL 1838)

I r a n : Hamadan: Hamadān env., Ali Sadr, 14.V.1999, K. Orszulik leg. (1 ex., cWR). - Kordestan: 13 km S Saqqez, 1400 m, 16.V.2002, D. Gianasso leg. (2 exs., MRSNT).

B u l g a r i a : Stara Zagora: Stara Zagora env. 16.V.1998, E.& P. Hajdaj leg. (3 exs., cHAJ, cWR). Known from Romania (JAKOBSON 1907: 373, STICHEL, 1923 : 81), Ukraine, the Caucasus area, Turkey and the Near East. APFELBECK (1904: 178, referring on VON OERTZEN 1886: 208) has quoted an occurrence in Greece (which was cited also in CATPAL: WRASE 2003b: 367) but new findings are not known. The Bulgarian specimens could be seen as a confirmation that the species also occurs in Greece. First records for Bulgaria and Iran.

Genus *Pseudaristus* REITTER 1900

Pseudaristus modestus (SCHAUM 1858)

J o r d a n : Irbid: Irbid reg., Sahm vill., 900 m, 19.IV.2003, I. Pljushtch leg. (1♂, cWR).

Known from Lebanon and Syria. First record for Jordan.

Subtribe H a r p a l i n a

Genus *Acinopus* DEJEAN 1821

Acinopus (s.str.) *laevigatus laevigatus* MÉNÉTRIÉS 1832

C h i n a : Gansu: "Kansou mer., Hoei-Sien" (1♂, ZMB). - Xinjiang: "Chin. Turkestan, Polu, 2450 m, 1890, Conradt" (1♂, ZMB). Borohoro Shan, Jining, Ining-H-Sien, 44.06N/81.56E, 26.-31.VII.1991, Snižek leg. (1♂, cWR).

After SCHÜTZE & KLEINFELD (1995: 80) the locality Hoei-shien refers to the city Hwei-Hsien, today called Hui Xian (33.47/106.07) and it is very likely that above mentioned locality "Hoei-Sien" is identical with it. First detailed records for Gansu, though this finding should be confirmed. First detailed record for Xinjiang. Both records already formally cited in CATPAL: KATAEV, WRASE & ITO (2003: 367).

Acinopus (*Haplinoporus*) *striolatus* ZOUBKOFF 1833

I r a n : Khorāsān: Gonābād, 1000 m, 9.V.1997, Škorpík leg. (1 ex., cWR). Kerman env., Deh bala, 14.V.2003, K. Orszulik leg. (2 exs., cORSZ, cWR). - Hamadān: Hamadān env., Ali Sadr, 14.V.1999, K. Orszulik leg. (1 ex., cWR).

T u r k e y : Ağrı: Doğubayazıt, 2000 m, 27.IV.1970, W. Schwarze leg. (1 ex., cWR).

JAKOBSON (1907: 374) mentioned the species also from "Persia" and from "Sind." (the latter being the regions in the Punjab and the lower Indus valley), findings from Pakistan and Afghanistan could corroborate it. Confirmation of the occurrence in Iran (not cited in CATPAL: KATAEV, WRASE & ITO 2003: 368); first detailed record for Turkey (already formally cited in CATPAL: KATAEV, WRASE & ITO l.c.).

Genus *Bleusea* BEDEL 1896

Bleusea ammophila TSCHITSCHÉRINE 1898a

I r a n : Sistān va Balūchestān: "Belutschistan, Jranshar, 800 m, 11.-21.IV.1954, Richter & Schäuffele" (1 ex., MNHUB).

I s r a e l : Tel Yeroham, 24.IV.1965, Bytinski-Salz leg. (1 ex., MNHUB).

First detailed records for Iran and Israel (already formally cited in CATPAL: KATAEV, WRASE & ITO 2003: 369). Further investigations must verify, if *B. deserticola* BEDEL 1896 and *B. ammophila* TSCHITSCHÉRINE are really distinct species.

Genus *Daptus* FISCHER VON WALDHEIM 1824

Daptus komarovi SEMENOV 1889

I r a n : Khūzestān: Ahvāz, VII-IX 2001, A. Afshari leg. (2 exs., cMUIL, cWR).

I r a q : Bagdhād: "Bagdad", "Ex Musæo H.W.Bates, 1892" (3 exs., MNHP). Abu Ghraib, IV 1984, Smatana leg. (1 ex., cLOH).

S y r i a : Al Hasakah: Al Hasakah, 7.-9.V.1995, P. Kabátek (1 ex., cWR, identification confirmed by B. Kataev). - Halab: Sfire env., 40 km E Aleppo [Halab], salt lake, 25.IV.2000, L. & F. Kantner (2 exs., cWR).

Up to now only known from Turkmenistan (KRYZHANOVSKIJ et al. 1995: 139). First detailed records for Iran, Iraq and Syria (already formally cited in CATPAL: KATAEV, WRASE & ITO 2003: 369).

Genus *Harpalus* LATREILLE 1802

Harpalus (Cryptophonous) idiotus BATES 1889

P a k i s t a n : North West Frontier Province: Indus-Kohistan, Kaghanthal, Naran, 2400-3000 m, 3.-13.VI.1977, de Freina leg. (1♂, 1♀, cWR); same data, but: 2400 m, 1.VIII.1982, A. Richter leg. (2♂♂, cWR).

Occuring in Jammu and Kashmir (KATAEV 1997: 156), so these findings were to be exspected. First detailed records for Pakistan (already formally cited in CATPAL: KATAEV, WRASE & ITO 2003: 370).

Harpalus (s.str.) *aequicollis* MOTSCHULSKY 1844

C h i n a : Gansu: Dogcanglhamo, ca. 4200 m, 12.-17.VII.1990, J. Kálab leg. (1♀, cWR). Umg. Xiahe (grasslands), 3250 m, 1.VIII. 1993, W. Heinz leg. (2♂♂, chZ, cWR). Labrang env., 3000 m, VI 1992, A. Richter leg. (1♂, cWR). - Shanxi: Wutai Shan, 150 km NE Taiyuan, 2350 m, 25.VIII.1996 (2♂♂, 3♀♀, cWR).

Distributed in Russia (southern Siberia to Amur), Mongolia, already recorded in China from Hebei, Nei Mongol, Qinghai, Sichuan, Shanxi (KATAEV 1997: 141; CATPAL: KATAEV, WRASE & ITO 2003: 371). First records for the Chinese province of Gansu.

Harpalus (s.str.) *amarellus* BATES 1891

I n d i a : Uttar Pradesh: Garwal, Gowind National Park, Taluka, 1900 m, 5.X.1997, J. Šťastný leg. (1♀, cWR).

Occurring in the western Himalayas from eastern Afghanistan to western Nepal (KATAEV 2001b: 384), hence this finding was to be expected. First detailed record for the Indian province Uttar Pradesh (already formally cited in CATPAL: KATAEV, WRASE & ITO 2003: 372).

***Harpalus* (s.str.) *angustitarsis* REITTER 1887a**

F r a n c e : Ardèche: Les Vans, 9.V.1986, J.G. Bosz leg. (1♂, cWR). - Aude: Gruissan, 10.VIII.1984, Günther leg. (1♂, cWR).

P o r t u g a l : Braga: Pedomé/Chaves, VI 1986, Hozman leg. (1♀, cWR).

The species already known from Spain and Morocco (KATAEV 1989: 258) was recorded from France (departement Pyrénées-Orientales) for the first time (KATAEV 2002a: 728). First records for the French départements Ardèche and Aude. ZABALLOS & JEANNE (1994: 103) have already mentioned the same locality (Pedomé) from Portugal.

***Harpalus* (s.str.) *autumnalis* (DUFTSCHMID 1812)**

G r e e c e : Alexandroúpoli: Evros delta, salt meadows, 24.IX.1988, Schmalfuss leg. (1♀, SMNS).

Recorded initially for Greece by WOLF (2003: 131), based on the finding of 1♂ in the Falakros Mts. which I have determined. Not cited in CATPAL: KATAEV, WRASE & ITO 2003.

***Harpalus* (s.str.) *cisteloides* *hurkai* DIVOKÝ, PULPÁN & RÉBL 1990**

R o m a n i a : Bihor: Arieseni, 14.IV.1989, Mraček leg. (1♂, cWR, determination confirmed by B. Kataev).

Distributed from north-western China, eastern Siberia, Central Asia (spp. *cisteloides* MOTSCHULSKY 1844), southern Russia and the Caucasus area (ssp. *schouberi* TSCHITSCHÉRINE 1898b) to Bohemia (Czech Republic). First record for Romania (already formally cited in CATPAL: KATAEV, WRASE & ITO 2003: 374), these finding fill a wide gap between the populations in the east and the west.

***Harpalus* (s.str.) *froelichii* STURM 1818**

G r e e c e : Ágio Oros: "Uranopolis n. Berg Athos", VII 1986, G. Novack leg. (1♂, cWR). - Dramá: Pirgi, loc. 6, 12.VII.1977, Wagener leg. ("Falakron, Pyrgoi", 1♀, ZMA). - Évros: Samothráci Isl., 2.VII.1995, Etonti leg. (1♀, MRSNT). - Thessaloníki: Asproválta, 7 m, 8.VIII.1977, loc. 66, Wagener leg. (3♂♂, 1♀, ZMA, cWR). Peristeróna, Limni Volvi Lake, 14.VI.2003, J. Říha leg. (1♂, 1♀, cRIH, cWR). Same data but: L. Kašpar leg. (2♀♀, cKAŠP, cWR). Rendina-Modi, 3.-20.VII.2002, Zd. Kraus leg. (1♀, cKR).

Widely distributed in the Palaearctic and known from the Balkans only from Bulgaria, Romania and Slovenia. First detailed records for Greece (already formally cited in CATPAL: KATAEV, WRASE & ITO 2003: 376).

***Harpalus* (s.str.) *inxpectatus* KATAEV 1989**

T u r k e y : Ağrı: Doğubayazıt, 1.V.1999, L. Klíma leg. (1♂, determination confirmed by B. Kataev, 1♀, cKLI, cWR).

Distributed from eastern and south-eastern Europe, Caucasus and southern Russia to Middle Asia. First detailed record for Turkey (already formally cited in CATPAL: KATAEV, WRASE & ITO 2003: 377).

***Harpalus* (s.str.) *masoreoides* BATES 1878**

C h i n a : Xinjiang: S slope of Tian San mts., road Kuga-Bayanbulak, ca. 100 km NNE Kuga, 2000-3000 m, 8.-11.V.1993 (2♂♂, 1♀, cWR, determination confirmed by B. Kataev).

P a k i s t a n : Jammu and Kashmir: Gilgit-Agency, Naltar, 3000-3400 m, 22.VI.1997, W. Heinz leg. (1♂, 1♀, cWR). - North West Frontier Province: Gilgit, Shandur pass, 3700 m, 6.-10.VII.1995, J. Klir leg. (1♀, cWR).

Widely distributed from the Pamir and Tianshan to Mongolia and known from eastern China (JAKOBSON 1907: 383, KATAEV 1990:104). First records for Pakistan.

***Harpalus* (s.str.) *politus politus* DEJEAN 1829**

F r a n c e : Lozère: Cevennen, Florac, VIII 1995, Meisner leg. (3♂♂, 1♀, cWR).

Distributed from west Siberia and north-western China to south-western Europe. The occurrence in the west seems to be relict-like, very often only old records (see MARGGI 1992: 225, on the occurrence in Switzerland and Europe). Not mentioned in BONADONA (1971). First detailed record for France (already formally cited in CATPAL: KATAEV, WRASE & ITO 2003: 380).

***Harpalus* (s.str.) *punctatostriatus* DEJEAN 1829**

C y p r u s : Lemesós: beach SW Limassol [Lemesós], 27.IV.1987, W. Heinz leg. (1♂, cHZ).

First detailed record for Cyprus (already formally cited in CATPAL: KATAEV, WRASE & ITO 2003: 380).

***Harpalus* (s.str.) *subcylindricus* DEJEAN 1829**

G r e e c e : Ioánnina: Ioánnina, 5.V.1993, V. Skoupý leg. (2♂♂, 2♀♀, cWR). - Kavála: Lekani, 700 m, 26.VI.1997, Etoni leg. (1♂, MRSNT). - Larissa: Ossa Mts., env. Spiliá, 1000 m, 18.VI.2003, R. Kmeco leg. (2♂♂, 2♀♀, cKM, cWR).

Recorded as new for Greece by WOLF (2003: 228), basing on the finding of 3♂♂ in Gamila (Xánthi), 2 of which I have determined.

***Harpalus* (s.str.) *xanthopus* *winkleri* SCHAUBERGER 1923**

G r e e c e : Thessaloníki: E Thessaloníki, E Volakes Mt., Falakro (alpine Matten), 1940 m, 41°18'02''N/24°04'51'', 29.V.2001, Schnitter & Komposch leg. (1♂, cWR).

First detailed record for Greece (already formally cited in CATPAL: KATAEV, WRASE & ITO 2003: 384).

***Harpalus* (*Semiophonus*) *signaticornis* (DUFTSCHMID 1812)**

I r a n : Āzarbāyjān-e Bākhtār: 5 km E Maku, 1140 m, 30.IV.1999, Škorpík leg. (1 ex., cWR).

First detailed record for Iran (already formally cited in CATPAL: KATAEV, WRASE & ITO 2003: 386).

***Harpalus* (*Pseudoophonus*) *suensonii* KATAEV 1997**

C h i n a : Hubei: SE Hubei, 20 km NW Tongshan, 29.7 N/114.3 E, stream valley, 6./19.VI.2002

(1♀, cWR, identification confirmed by B. Kataev). - Shaanxi/Sichuan: border Shaanxi – Sichuan, Daba Shan, pass 20 km SSE Zhenping, 1700-1800 m, 31° 44' N, 109° 35' E (small creek valley, young dry mixed forest/field edge) 9/12.VII.2001, Wrase leg. (1♀, cWR, identification confirmed by B. Kataev).

Described from eastern China (province of Jiangsu) and from Korea. First record for the Chinese province Hubei. First detailed record for the Chinese provinces of Shaanxi and Sichuan (already formally cited in CATPAL: KATAEV, WRASE & ITO 2003: 386).

***Harpalus (Zangoharpalus) tinctulus luteicornoides* BREIT 1913**

C h i n a : Hubei: SE. Hubei, Mufu Shan, Jigongshan Forest Park, 1000 m, 29.4N/114.6E, 3.-5/18.VI.2002 (1♂, cWR). SE Hubei, 20 km NW Tongshan, 29.7 N/114.3 E, stream valley, 6/19.VI.2002 (1♂, cWR).

Already known in China from the provinces, autonomous regions or municipalities of Beijing, Fujian, Hunan, Jiangsu, Sichuan, Shaanxi, Shanghai and Zhejiang (CATPAL: KATAEV, WRASE & ITO 2003: 386). First records for the Chinese province of Hubei.

Genus *Nipponoharpalus* HABU 1973

***Nipponoharpalus discrepans* (A. MORAWITZ 1862)**

C h i n a : Hubei: Guanmenshan, 1500 m, 31.45N/110.4E, 21.VI.-13.VII.2003, pit fall traps (2♀ ♀, cWR). - Shanxi: Yonji, Zhongtiaoshan Mts., 4.-12.V.2004, E. Kučera leg. (2♀ ♀, cKUČ, cWR).

Widely distributed in East Asia; recorded in China from the provinces and municipalities Beijing, Lijiang, Sichuan and Shaanxi (CATPAL: KATAEV, WRASE & ITO 2003: 388). First records for Hubei and Shanxi.

Genus *Ophonus* DEJEAN 1821

***Ophonus (Hesperophonus) convexicollis* MÉNÉTRIÉS 1832**

B u l g a r i a : Tolbukhin: General Toshevo, 6.-10.VII.1987, O. Hovorka leg. (1♀, cWR).

First detailed record for Bulgaria (already formally cited in CATPAL: KATAEV, WRASE & ITO 2003: 388).

***Ophonus (Hesperophonus) cribicollis* (DEJEAN 1829)**

I r a n : Āzarbayğan-e Bākhtārī: 5 km E Maku, 1140 m, 30.IV.1997, Škorpík leg. (2 exs., cFAR, cŠKOR).

I s r a e l : Wadi-Kelt [Wadi Quilt], 24.IV.1927, O. Theodor leg. (1♂, TAU).

First detailed records for Iran and Israel (already formally cited in CATPAL: KATAEV, WRASE & ITO 2003: 389).

***Ophonus (Hesperophonus) jailensis* (SCHAUBERGER 1926)**

T u r k e y : Ankara: 5 km N Kizilcahamam, Sarakoy env., 24.V.2000, J. Mertlik leg. (1♀, cWR). -

Antalya: Elmalı, Avlanbeyli Geç, 800-1600 m, 14.-17.VI.1996, J. Vávra leg. (1♀, cVÁV). -

Artvin: Mescit Dağları, env. Klickaya, 2600-2900, alp., snow, S. Benedikt leg. (2♀ ♀, cWR). -

Kastamonu: Agli, 56 km NNW Kastamonu, 22.VI.1996, Z. Malinka leg. (2♂♂, 1♀, cMAL, cWR). N Kastamonu, Seydiler/Küre, 15.VII.1996, C. Bayer & H. Winkelmann leg. (2♂♂, cWR). Yaragilöz Mts., N Devrekâni, 1400 m, 4.VI.1991, J. Macek leg. (2♂♂, 4♀♀, cVÁV, cWR). - Kocaeli: Tavşanlı 15 km NE Gebze, 26.IV.1994, V. Biža & Z. Košťál leg. (2♂♂, 1♀, cFACCH, cWR). - Zonguldak: Safranbolu, 1000 m, 4.-5.VI.1996, Z. Malinka leg. (1♂, cMAL).

First detailed records for Turkey (already formally cited in CATPAL: KATAEV, WRASE & ITO 2003: 389). For differentiation of the species of the *Ophonus jailensis* group see WRASE 1995.

Ophonus (Hesperophonus) minimus MOTSCHULSKY 1845

Turkey: Kars: Aygr Gölü, 32 km NW Kars, 2170 m, 6.VII.1989, I. Wolf leg. (1♂, cWR). Kars town env., plateau, ca 5 km SE, 7.VII.1989, B. Březina leg. (1♂, cWR).

Distributed from south-eastern Europe, the Caucasus, northern Kazakhstan to north-western China (KATAEV 2001a: 183). First detailed records for Turkey (already formally cited in CATPAL: KATAEV, WRASE & ITO 2003: 389). Not yet found in Armenia, but an occurrence is very likely.

Ophonus (Hesperophonus) similis (DEJEAN 1829)

Iran: Āzarbāyğān-e Garbi: Tahkt-e Suleiman, 14.V.1999, K. Orszulik leg. (1♂, cWR). - Gilan: Rudbar env., 1.VI.2001, K. Orszulik leg. (3♂♂, 1♀♀, cORS, cWR). - Khūzestān: "Khuzistan, Dekh-i-Diz", 23.-25.XII.1903, Zarudnyi leg. (1♂, ZISP).

First detailed records for Iran (already formally cited in CATPAL: KATAEV, WRASE & ITO 2003: 389).

Ophonus (Hesperophonus) subquadratus (DEJEAN 1829)

Morocco: Téouan: El Biutz S Jbel Musa, ca. 350 m (lime stone massif) 16.II.2003, Wrase leg. (1♂, cWR).

Iran: Fārs: Fasa, 9.VIII.1970, loc. no. 50, Exp. Nat. Mus. Praha (1♀, NMP).

Syria: Tartus: Djebel Ansariya [Jabal an Nuṣayriya], Qadmus [Al Qadmūs] env., 900 m, 7.VIII.1988, J. Macek leg. (2♂♂, cMAC, cWR).

ANTOINE (1959: 377) mentioned the fact, that specimens recorded from Morocco as "subquadratus v. meridionalis" by ESCALERA (1914: 32) in his catalogue, belong undoubtedly to *O. rotundatus* (DEJEAN), as he was able to examine them himself. First certain record for Morocco. First detailed records for Iran and Syria (already formally cited in CATPAL: KATAEV, WRASE & ITO 2003: 389).

Ophonus (Metophonus) austrocaspicus KATAEV & BELOUSOV 2001

Iran: Māzandarān: Gorgan env., 25.V.2001, K. Orszulik leg. (1♂, cORS). - Gilan: Rudbar env., 1.VI.2001, K. Orszulik leg. (2♂♂, cORS, cWR).

Described from Azerbaijan, Daghestan and Iran.

Ophonus (Metophonus) gabrieleae WRASE 1987

Greece: Préveza: Kanali, 22.VII.1998 (lux), M. Egger leg. (2♂♂, 2♀♀, cEGG, cWR). Préveza, Mesovoun, 2.VIII.1998, M. Egger leg. (1♀, cWR).

S y r i a : Tartus: Umg. Al Qadmüs, 14.IV. 1978, W. Heinz leg (2♂♂, cHZ, cWR). Djebel Ansariya [Jabal an Nuşayıriya], Qadmus [Al Qadmüs] env., 900 m, 4.VIII.1988 (1♂), 10.VIII.1988 (1♀), 7.VIII.1988 (2♂♂), 12.VIII.1988 (1♂), J. Macek leg. (cMAC, cWR). Umg. Btar, W Massâf [Masyaf], 700-900 m, 8.IV.1988, W. Heinz leg. (2♂♂, cHZ, cWR).

First detailed records for Greece (already formally cited in CATPAL: KATAEV, WRASE & ITO 2003: 390). Confirmation of the occurrence in Syria (See the remarks under *O. israelita*).

***Ophonus (Metophonus) gammeli* (SCHAUBERGER 1932)**

G r e e c e : Pieria/Lárissa: Olympos Mts., 1100 m, 8.VI.1995, V. Skoupý leg. (1♀, cWR).

First detailed record for Greece (already formally cited in CATPAL: KATAEV, WRASE & ITO 2003: 390).

***Ophonus (Metophonus) hittita* SCIAKY 1987**

I r a n : Hamadân: Hamadân env., Ali Sadre, 14.V.1999, L. Klíma leg. (1♂, 1♀, cKL, cWR).

Described from Turkey. First records for Iran (already formally cited in CATPAL: KATAEV, WRASE & ITO 2003: 390).

***Ophonus (Metophonus) israelita* PIOCHARD de la BRÛLERIE 1875**

T u r k e y : Adiyaman: Karadut, Narince env., 4.-6.VI.1995, Mička leg. (1♂, cWR). - Gaziantep: Oğuzeli, 13.IV.2002, J. Skubrovec leg. (1♂, 1♀, cBUL, cWR). - Sanlı Urfa: Umg. Çaylarbaşı, ca. 600 m, 11.IV.1976, W. Heinz leg. (2♂♂, cHZ, cWR). Umg. Siverek, ca. 950 m, 12.VI.1976, W. Heinz leg. (1♀, cWR).

I r a n : Āzarbāyjān-e Bākhtārī: Bisotun E Kermansha, 1300 m, 25.III.1995 W. Heinz leg (1♂, cHZ). - Hamadân: pass S Kangavar, 1500 m, 26.III. 1996, W. Heinz leg. (1♂, cWR).

SCIAKY (1987: 101) was not sure if the citation of SCHAUBERGER (1926: 172, 177) for *O. israelita* from "As. min., Syr., Mesop." referred actually to this species or to the very similar and later described *O. gabrieleae* WRASE. Not mentioned in CASALE & VIGNA TAGLIANTI 1999. Above mentioned localities verify an occurrence in Turkey. First detailed record for Iran (already formally cited in CATPAL: KATAEV, WRASE & ITO 2003: 390).

***Ophonus (Metophonus) judaeus* PIOCHARD DE LA BRÛLERIE 1875**

J o r d a n : Irbid: 10 km NNE Jerash, 20.IV.2002, M. Snížek leg. (1♀, cWR). - Máān: Shaubak [Ash- Shawbak], ca. 1500 m, 26.IV.1998, W. Heinz leg. (1♀, cWR). - Ammān: Latha, S Tafila [At-Tafilah], 1400 m, 18./21.IV.1998 W. Heinz leg. (1♂, cHZ).

S y r i a : Idlib: Idlib, 90 km SW Halab, 3.V.1982, M. Dvořák leg. (2♂♂, cWR).

First detailed records for Jordan and Syria (already formally cited in CATPAL: KATAEV, WRASE & ITO 2003: 390). SCIAKY (1987: 77) recorded the species from Israel (Mt. Hermon), hence the occurrence in Syria was to be expected.

***Ophonus (Metophonus) stricticollis* TSCHITSCHÉRINE 1893**

C h i n a : Sichuan: Jiuzhaigou, ca. 2400 m, 29.VI.1996 W. Heinz leg. (3♂♂, 1♀, cHZ, cWR). Mugecuo lake VI 1993, T. Deuve leg. (1♂, MNHP).

Already known from the Chinese provinces or municipalities of Beijing, Gansu, Liaoning, Shanxi and Sichuan (CATPAL: KATAEV, WRASE & ITO 2003: 391). First detailed records for the Chinese province of Sichuan (already formally cited in CATPAL: KATAEV, WRASE & ITO: l.c.).

***Ophonus (Metophonus) subsinuatus* REY 1886**

Israe : "Tsa fariya, 3.VII.1985, D. Gerling leg." (1♂, TAU).

First detailed record for Israel (already formally cited in CATPAL: KATAEV, WRASE & ITO 2003: 391).

***Ophonus (Metophonus) transversus* MOTSCHULSKY 1844**

Russia : Altai Republic: Altai Katun env., Tiungur, 24.VII.2002, K. Orszulik leg. (10♂♂, 4♀♀, cORSZ, cWR).

KATAEV (2001a: 162) re-described this very little-known and rare species and gave its range as occurring from Crimea to central Kazakhstan. The above mentioned findings give the Altai region as the eastern limit of the distribution. First record for the Altai Republic.

***Ophonus (Metophonus) veluchianus* (G. MÜLLER 1931)**

Turkey : Cankiri: 23 km N Çankiri, 1100 m, 20.-21.VI.1996, J. Vávra leg. (1♂, 1♀, cVÁV, cWR); same labelled but: Zd. Malinka leg. (3♂♂, 2♀♀, cMAL, cWR).

Iran : Āzarbāyğān-e Garbī: Serou, 50 km NW Orūmīye, 37.39N/44.45E, 9.VI.1999, E. & P. Hajdaj (1♂, cWR).

Romania : Babadag, 21.V.1982, J. Bašta leg. (1♂, cWR). Babadag, 31.V.1987, V. Skoupý leg. (1♂, cWR).

Syria : Al Lādhīqīyah: Djebel Ansariya [Jabal an Nuṣayrīya], E Sharkiya ['Ayn'ash Sharqīyah], 1200 m, 28.IV.1989, J. Macek leg (1♀, cWR).

Already recorded from Turkey (CASALE & VIGNA TAGLIANTI 1999: 390, with the name *O. cordicollis* DEJEAN). First detailed records for Iran, Romania and Syria (already formally cited in CATPAL: KATAEV, WRASE & ITO 2003: 391).

***Ophonus* (s.str.) *diffinis* (DEJEAN 1829)**

Iran : Āzarbāyğān-e Bākhtān: 5 km E Maku, 1140 m, 30.IV.1997, Škorpík leg. (1♂, 1♀, cWR).

First detailed record for Iran (already formally cited in CATPAL: KATAEV, WRASE & ITO 2003: 391).

***Ophonus* (s.str.) *franziniorum* SCIAKY 1987**

France : Var: Banyuls-Méounes, 15.VI.1982, L. Feller leg. (1♀, cWR).

First record for the French mainland, already known from Corsica (WRASE 1995: 347).

Genus *Parophonus* GANGLBAUER 1891

***Parophonus* (s.str.) *dia* REITTER 1900**

C y p r u s : Larnaca: Skarinou, 16.-18.VI.1993, M. Kafka leg. (1♀, cWR).

Described from Lebanon (Beirut), recorded from Anatolia and the Middle East (SCIAKY 1992: 51). In CATPAL: KATAEV, WRASE & ITO 2003: 393 solely recorded from Syria. First record for Cyprus.

***Parophonus* (s.str.) *vigil* TSCHITSCHÉRINE 1901**

T u r k e y : Bingöl: 20-30 km E Viranşehir, ca. 500 m, 16.IV.1981, W. Heinz leg. (1♂, 1♀, cWR). - İçel: ca 5 km N Tarsus, 100-200 m, 5.IV.1980, W. Heinz leg. (4♂♂, 1♀, cWR). - Urfa: Çaylarbaşı env., ca 600 m, 11.IV.1976, W. Heinz leg. (1♂, 2♀♀, cWR).

Described from Syria, an occurrence in eastern und southern Turkey was to be expected but not cited in CASALE & VIGNA TAGLIANTI 1999. First records for Turkey.

***Parophonus* (s.str.) *planicollis* (DEJEAN 1829)**

I r a n : Mazandarān: Gorgan env., 25.V.2001, K. Orszulik leg. (2♂♂, 1♀, cORS, cWR).

Distributed from Italy and the Balkans to the Caucasus, Transcaucasus, Anatolia and Near East (SCIAKY 1992: 55). The record for Asian Kazakhstan (CATPAL: KATAEV, WRASE & ITO 2003: 393) needs to be confirmed. First record for Iran.

Subtribe S t e n o l o p h i n a

Genus *Acupalpus* LATREILLE 1829

***Acupalpus* (*Palcuapus*) *inornatus* BATES 1873**

C h i n a : Hunan: N. Hunan, Wuling Shan 29.4N/110.4E, 700 m, 4.-7.VII.2003 (1♂, cWR).

Widely distributed in East Asia (CATPAL: JAEGER & KATAEV 2003: 399). First record for the Chinese province of Hunan.

Genus *Loxoncus* SCHMIDT-GÖBEL 1846

***Loxoncus* *circumcinctus* (MOTSCHULSKY 1858)**

C h i n a : Fujian: Wuyi Shan, ca. 125 km N Nanping, 200-400 m, 7.-22.IV.1988, Görgner & Kleinfeld leg. (1♂, cWR). - Hubei: SE Hubei, Mufu Shan, Jiugongshan forest park, 1100 m, 29.4N/114.6E, 3.-5./18.VI.2002 (1♂, cWR).

Widely distributed in East Asia (CATPAL: JAEGER & KATAEV 2003: 404). First records for the Chinese provinces of Fujian and Hubei.

Genus *Stenolophus* DEJEAN 1821

***Stenolophus (Egadroma) bajaurae* ANDREWES 1924**

T a d z h i k i s t a n : Amu-Darja riv., 30 km W Shartuz, 300 m, 30.VI.1994, V. & A. Lukhtanov leg. (3♂♂, 1♀, NME, cWR).

U z b e k i s t a n : Surkhandarya: Amu-Darja riv., Termez, 300 m, 20.-30.VI.1994, lux, V. & A. Lukhtanov leg. (1♂, 3♀♀, NME, cWR).

I n d i a : Delhi: Delhi, 28.VIII.1980, A. Hamet leg. (1♂, cWR).

The species occurs in the western Himalayas from Afghanistan to Nepal and was already recorded from southern Tadzhikistan by KATAEV (2002a: 724). First records for Uzbekistan and India.

***Stenolophus (Egadroma) difficilis* (HOPE 1845)**

C h i n a : Hubei: SE Hubei, 20 km NW Tongshan, 29.7 N/114.3 E, stream valley, 6./19.VI.2002 (2♀♀, cWR).

Widely distributed in East Asia (CATPAL: JAEGER & KATAEV 2003: 405). First record for the Chinese province of Hubei.

***Stenolophus* (s.str.) *discophorus* (FISCHER VON WALDHEIM 1823)**

S y r i a : Al Lādhiqīyah: river valley E Rabi'ah (ca. 40 km NE Al Lādhiqīyah, 31.V 2002, V. Skoupý leg. (1 ex., B. Jaeger det., cSKOUP).

Widely distributed from the European Mediteranean to west Siberia (CATPAL: JAEGER & KATAEV 2003: 405). First record for Syria.

***Stenolophus* (s.str.) *liebmanni* J. MÜLLER 1931**

I s r a e l : Dalia, 18.VII.1976, O. Mehl leg. (1♂, cWR). Golan, Qazrin, 8.IV.1986, M. Jäch leg. (2 exs., B. Jaeger det., NHMW, cJAEG). Einan Hula, 27.VIII.1984, leg. M. Jäch (1 ex., B. Jaeger det., NHMW).

Up to now only known from Syria (CATPAL: JAEGER & KATAEV 2003: 405). First record for Israel.

***Stenolophus* (s.str.) *steveni* KRYNICKY 1832**

I r a n : Māzandarān: Nahār Horān, 10 km S Gorgān, 36.45N/54.28E, 15.VI.1999, E. & P. Hajdaj leg. (1♀, cWR).

S y r i a : Al Lādhiqīyah: river valley E Rabi'ah (ca. 40 km NE Al Lādhiqīyah, 31.V 2002, V. Skoupý leg. (4 exs., B. Jaeger det., cJAEG, cSKOUP).

In Asia only recorded from Turkmenistan and Turkey (CATPAL: JAEGER & KATAEV 2003: 406). First records for Iran and Syria.

Tribe Lebiini

Subtribe Apennina

Genus *Platytarus* FAIRMAIRE 1850

Platytarus faminii faminii (DEJEAN 1826)

Iran : Fārs: Pasargad, 8.V.1999, K. Orszulik leg. (1 ex., cWR). - Hormozgān: Hasān Langī, 62 km E Bandar-e Abbās, 26.IV.2002, M. Rejzek leg. (1 ex., cWR). 15 km S Mināb, E Bandar-e Abbās, 26.IV.2002, P. Kabátek leg. (2 exs., cWR). - Khorāsān: Kerman env., Deh bala, 14.V.2003, K. Orszulik leg. (1 ex., cORSZ). - "S.O. Iran (Djiroft), Anbar-Abad", 21.-30.IV.1956, W. Richter leg. (1 ex., cWR).

Widely distributed in the Mediterranean region, Near and Middle East to Middle Asia, also in the Afrotropical region. First record for Iran (which was to be expected).

Subtribe Lebiina

Genus *Lebia* LATREILLE 1802

Lebia (Lamprias) cyanocephala cyanocephala (LINNAEUS 1758)

Jordan : Maān: Petra, 11.VI.1994, W.G. Ullrich leg. (3 exs., cWR); Petra, Taybeh 21.VI.1994, W.G. Ullrich leg. (1 ex., cWR).

Widely distributed in the Palaearctic. First record for Jordan.

Lebia (s.str.) *cruxminor cruxminor* (LINNAEUS 1758)

Iran : Lorestān: pass 52 km E Korramābād, 18.IV.2002, P. Kabátek leg. (1 ex., cWR). Dorūd, 80 km E Korramābād, 33.25N/49.06E, 11.VI.1999, P. Kabátek leg. (1 ex., cWR). - Tehrān: Zangān, Avād, 80 km SW Tākestān, 4.V.2002, P. Kabátek leg. (1 ex., cKAB).

Jordan : Al Karak: Al Karak, 11.VI.1994, W.G. Ullrich leg. (2 exs., cWR). - Maān: Petra, 11.VI.1994, W.G. Ullrich leg. (3 exs., cWR); Petra, Taybeh 21.VI.1994, W.G. Ullrich leg. (2 exs., cWR).

Due to the trans-Palaearctic range these captures were to be expected. First records for Iran and Jordan.

Lebia (s.str.) *trimaculata* (LINNAEUS 1758)

Iran : Āzarbāyjān-e Garjī: Kandovān, 2150 m, 27.48.06N/46.14.14E, 1.-2.X.1998, P. Kabátek leg. (3 exs., cKAB, cWR). - Fārs: Pasargad, 8.V.1999, K. Orszulik leg. (1 ex., cWR). - Khorāsān: Sirvan env., Namanlu, 2300 m, 24.V.2003, K. Orszulik leg. (2 exs., cORSZ).

Widely distributed in the Palaearctic. First record for Iran.

Tribe Liciini

Subtribe Liciina

Genus *Licinus* LATREILLE 1802

Licinus (s.str.) *aegyptiacus* DEJEAN 1826

J o r d a n : Wadi Ghuba, 9.V.1995, K. Deneš sen. leg. (1♀, cWR).

Distributed in the eastern Mediterranean (CATPAL: BAEHR 2003b: 441). First record for Jordan.

Genus *Badister* CLAIRVILLE 1806

Badister (s.str.) *brevicollis* REICHE 1875

G r e e c e : Ahaia: 30 km SW Pátra, Metochi salt land, lux, 9.VI.2003, R. Kmeco leg. (1♂, 1♀, cKM, cWR). - Árta: Pétra nr. Arta, 24.V.2002, J. Kašpar leg. (6♂♂, 8♀♀, cKASP, cWR). - Préveza: Kanáli, lux, 22.VII.1998, M. Egger leg. (1♀, cEGG).

This species, of which only females were known up to now, was recorded from Turkey, Israel, Lebanon and Syria (CATPAL: BAEHR 2003b: 440). It was previously re-described (WRASE 1995: 353) and at that occasion it was also mentioned, that there were three old records which could not be verified. The first one related to some specimens from Adana which were identified as *B. brevicollis* by MARĀN (1938: 66), the second a specimen, collected by himself in Greece (Alexandroupoli), and the third of a specimen from Messolóngi, stated by APFELBECK (1904: 163) as *B. unipustulatus* v. *trapezicollis*, identified provisionally as *B. brevicollis* by MARAN (l. c.). Above mentioned findings confirm the occurrence in Greece and make it very likely that the name *trapezicollis* APFELBECK 1904 is a synonym to *B. brevicollis* instead of *B. unipustulatus*, as cited in CATPAL: BAEHR 2003b: 440. Median lobe see Fig. 23, 24.

First certain record for Greece.

Badister (s.str.) *bullatus* (SCHRANK 1798)

S p a i n : Leon: Riaño, P. to Los Señales, 1700 m, 21.VI.1990, Meregalli leg. (1♀, cWR). - Lugo: Sierra de Ancares, A Degrada vill., 1100-1250 m, 8./9.VII.1996, Wrase leg. (1♂, cWR). - Salamanca: La Flecha, Cabrerizos (3 km E Salamanca), 6.III.1999, Wrase leg. (2♂♂, 8♀♀, cWR). - Jaén?/Madrid?/Tarragona?: "España, El Molar, 8.X.1978, R. Macek leg. (1♀, cWR).

Old records from Spain seem to be doubtful. DE LA FUENTE in his "Tablas analíticas" (1927: 199) mentioned the species under the name "*B. bipustulatus* F." with the "a. lacertosus Sturm" and "v. meridionalis Puel", these taxa were later recognized as distinct species. JEANNE & ZABALLOS (1986: 127) referred only on *B. bipustulatus* ssp. *meridionalis* and ZABALLOS & JEANNE (1994: 110) on *B. bullatus* (= *bipustulatus*) ssp. *meridionalis*. The last catalogue of Iberian Carabidae (SERRANO 2003: 70) lists, in subgenus *Badister*, *B. unipustulatus* BONELLI and *B. meridionalis*. A revision of the whole Spanish material of this group is needed. First certain record for Spain.

***Badister* (s.str.) *meridionalis* PUEL 1925**

I r a n : Gilan: Bandar-Pahlavī, lux, 31.VII.1967, W. Heinz leg. (1♂, 1♀, cHZ, cWR).

K a z a k h s t a n : Lake Alakol, NNE Obuchovka, (15), Salzwiesen, Schilfufer, Halbwüste, (lux), 350 m, 46.17.932 N/81.21.534 E, 28/29.VI.2000, Schnitter, Kühne & Nuss leg. (5♂ ♂, 5♀ ♀, cSCHN, cWR). Ili River, NNE Taschkarasu Neftbasa (06), Dünen, Flußaue (lux), 500 m, 43.57.819 N/ 79.37.235 E, 20.-21.VI.2000, Schnitter, Kühne & Nuss leg. (1♀, cWR).

T u r k e y : Edirne: Kapıkule (border to Bulgaria), lux, 1.VII.1999, M. Šlachta leg. (1♂, 1♀, cSL, cWR). - Afyon: Sultandağları near Çay, 1100-2000 m, 18.VII.1965, Korge & Heinz leg. (1♀, well agreeing with specimens from central Europe, cKOR). - Ankara: Gölbasi S Ankara, 1100 m, 25.IV.1992, W. Heinz leg. (1♀, small and slender, determination somewhat unsure, cHZ).

T a d z h i k i s t a n : Khazretisho Mts., Yosgan, 1600-1800 m, 20.V.1986, V. Mikhailov leg. (1♂, cWR).

While the range in its western part is fairly well known, the distribution limit towards the east was unclear. The occurrence in Turkey was given as questionable (CASALE & VIGNA TAGLIANTI 1999: 394). In CATPAL: BAEHR 2003b: 440 only one country in Asia is recorded: KA (= Kashmir), but I suppose by mistake and it is surely meant KZ (= Kazakhstan), all the more since also KRYZHANOVSKIY & al. (1995: 159) referred to the plains of Kazakhstan and also Turan (which reaches Tadzhikistan) in its distribution. First records for Iran and Turkey.

Tribe Platynini

Genus *Atranus* LE CONTE 1848

***Atranus ruficollis* (GAUTIER DE COTTES 1858)**

S y r i a : Hama: Jabal an Nuṣayriyah, Slinfah, 25.II.2002, Vl. Skoupý leg. (1 ex., cSK).

Recorded in Asia from Turkey (CATPAL: BOUSQUET 2003b: 457), additionally a distribution is given for the Caucasus area, Armenia and parts of Turan (KRYZHANOVSKIY et al. 1995: 118). First record for Syria.

Tribe Sphodrini

Subtribe Calathina

Genus *Calathus* BONELLI 1810

***Calathus* (*Neocalathus*) *peltatus* KOLENATI 1845**

I r a n : Khorāsān: Mašhad env. Božgan, 17.V.2003, K. Orszulik leg. (1 ex.); Klapka leg. (2♂ ♂, 1♀, cORSZ, cWR).

Distributed from southern Russia, Armenia and Azerbaijan to Middle Asia (CATPAL: HOVORKA & SCIAKY 2003: 528). First record for Iran.

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Zusammenfassung

Im "Catalogue of Palaearctic Coleoptera, Volume 1", 2003 (CATPAL) wurden zahlreiche nomenklatorische und taxonomische Änderungen in der Tribus Harpalini vorgenommen, die in dieser Arbeit detailliert begründet werden.

Informationen werden gegeben über folgende Synonymisierungen, die im CATPAL vorgeschlagen wurden (älteres Synonym als erstes aufgeführt): *Dixus eremita* (DEJEAN 1825) = *Aristus punctulatus* CHAUDOIR 1844 = *Ditomus capito* var. *orientalis* J. SAHLBERG 1913 = *Ditomus tanaiticus* LUTSHNIK 1933. *Dixus moloch* (PIOCHARD DE LA BRÜLERIE 1873) = *Aristus subconstrictus* REITTER 1900. Die Gattung *Nesarpalus* BEDEL 1897 wurde in einem neuen nomenklatorischen Sinn aufgefaßt, da der Name *Harpalus vividus* DEJEAN nicht verfügbar war. *Ophonus laticollis* MANNERHEIM 1825 wurde als Ersatznamen für *Ophonus punctatulus* (DUFTSCHMID 1812), nec *Carabus punctatulus* FABRICIUS 1792 benutzt, da der Gebrauch des Namens *nitidulus* durch STEPHENS 1828 auf einer Mißdeutung beruhte. Genaue Informationen werden über eine neue Kombination gegeben, die im CATPAL vorgeschlagen wurde: *Penthophonus ophonoides* JEDLIČKA 1958 = *Ophonus (Metophonus) ophonoides* (JEDLIČKA 1958). Lectotypen werden in dieser Arbeit designiert von: *Aristus curtangulus* REITTER 1900; *Aristus moloch* PIOCHARD DE LA BRÜLERIE 1873; *Aristus punctulatus* CHAUDOIR 1844; *Ditomus capito* var. *orientalis* J. SAHLBERG 1913; *Ditomus tanaiticus* LUTSHNIK 1933. Redeskriptionen werden gegeben von: *Dixus eremita* (DEJEAN 1825), *Dixus semicylindricus* (PIOCHARD DE LA BRÜLERIE 1872), *Dixus moloch* (PIOCHARD DE LA BRÜLERIE 1873), *Dixus klapperichi* (JEDLIČKA 1964) und *Ophonus (Metophonus) ophonoides* (JEDLIČKA 1958). Zusätzlich werden Tafeln mit zahlreichen Meß- und Index-Werten, Abbildungen der Medianlobi und anderer für die Identifizierung wichtiger Körperteile, Informationen über innerartliche und geografische Variabilität, über Typen, Synonymien und auch revidierte Verbreitungssangaben präsentiert. Neue, in dieser Arbeit vorgeschlagene Synonyme (das jüngere Synonym als erstes aufgeführt): *Ophonus musayabensis* ALI 1967 = *Ophonus sabulicola* (PANZER, 1796); *Acinopus khalensis* ALI 1967 = *Acinopus megacephalus* (ROSSI 1794). *Carabus cordatus* DUFTSCHMID 1812 (= *Ophonus cordatus*) wird vorgeschlagen als nomen protectum und *Carabus cordatus* SCOPOLI 1763 als nomen oblitum. Neumeldungen folgender Arten werden mit genauen faunistischen Daten auf Länder- oder Provinzebene angeführt (obwohl diese teilweise schon im CATPAL auf Länderebene genannt werden): *Apotomus syriacus* JEDLIČKA 1961: Iran (Sīstān va Balūchestān); Pakistan: (Balūchistān). *Chlaenius* (*Dinodes*) *viridis* MÉNÉTRIÉS 1832: Griechenland (Fokida). *Tetragonoderus* (s.str.) *intermedius* SOLSKY 1874: Iran (Hormozgān). *Amblystomus algirinus* REITTER 1887b: Europa: Portugal (Faro). *Amblystomus niger* (HEER 1841): Aserbaidschan; Georgien; Iran (Čahār Mahāll-o-Bahtyārī, Fārs); Kasachstan; Usbekistan. *Amblystomus rectangulus* REITTER 1883: Aserbaidschan. *Progonochaetus* (s.str.) *indicus* KATAEV 2002b: Nepal. *Progonochaetus* (s.str.) *laevistriatus* (STURM 1818): Nepal. *Carenochyurus titanus* Solsky 1874: Iran (Khorāsān). *Carterus* (s.str.) *dama* (P. ROSSI 1792): Rumänien. *Carterus* (s.str.) *gilvipes* (PIOCHARD DE LA BRÜLERIE 1873): Portugal (Faro). *Dixus interruptus* (FABRICIUS 1775):

Israel; Türkei (Antalya). *Dixus semicylindricus* (PIOCHARD DE LA BRÜLERIE 1872): Pakistan (Chitral); Indien (Uttar Pradesh); China (Xinjiang). *Eucarterus sparsutus* (REITTER 1898): Griechenland (Ahaia, Préveza); Iran (Ilam, Lorestan, Kordestan). *Penthus tenebrioides* (WALTL 1838): Bulgarien (Stara Zagora); Iran (Hamadan, Kordestan). *Pseudaristus modestus* (SCHAUM 1858): Jordanien (Irbid). *Acinopus* (s.str.) *laevigatus laevigatus* MÉNÉTRIÉS 1832: China (Gansu; Xinjiang). *Acinopus* (*Haplacrinopus*) *striolatus* ZOUBKOFF 1833: Türkei (Ağrı). *Bleusea ammophila* TSCHITSCHÉRINE 1898a: Iran (Sistān va Baluchestān); Israel. *Daptus komarovii* SEMENOV 1889: Syrien (Al Hasakah, Halab); Iran (Khuzestan); Iraq (Baghdad); Israel. *Harpalus* (*Cryptophonus*) *idiotus* BATES 1889: Pakistan (North West Frontier Province). *Harpalus* (s.str.) *aequicollis* MOTSCHULSKY 184: Gansu (China). *Harpalus* (s.str.) *amarellus* BATES 1891: Uttar Pradesh (Indien). *Harpalus* (s.str.) *angustitarsis* REITTER 1887a: Ardèche, Aude (Frankreich). *Harpalus* (s.str.) *cisteloides* hurkai DIVOKÝ, PULPÁN & RÉBL 1990: Rumänien (Bihor). *Harpalus* (s.str.) *froelichii* STURM 1818: Griechenland (Ágio Oros, Dramá, Évros, Thessaloniki). *Harpalus* (s.str.) *inxpectatus* KATAEV 1989: Türkei (Ağrı). *Harpalus* (s.str.) *masoreoides* BATES 1878: Pakistan (Jammu and Kashmir, North West Frontier Province). *Harpalus* (s.str.) *politus politus* DEJEAN 1829: Frankreich (Lozère). *Harpalus* (s.str.) *punctatostriatus* DEJEAN 1829: Zypern (Lemesos). *Harpalus* (s.str.) *subcylindricus* DEJEAN 1829: Ioánnina, Kavála, Laríssa (Griechenland). *Harpalus* (s.str.) *xanthopus* *winkleri* SCHAUBERGER 1923: Griechenland (Thessaloniki). *Harpalus* (*Semiophonus*) *signaticornis* (DUFTSCHMID 1812): Iran (Ázarbaygân-e Bâkhtari). *Harpalus* (*Pseudoophonus*) *suensonii* KATAEV 1997: Hubei, Shaanxi, Sichuan (China). *Harpalus* (*Zangoharpalus*) *tinctulus luteicornoides* BREIT 1913: Hubei (China). *Nipponoharpalus* *discrepans* (A. MORAWITZ 1862): Hubei, Shanxi (China). *Ophonus* (*Hesperophonus*) *convexicollis* MÉNÉTRIÉS 1832: Bulgarien (Tolbukhin). *Ophonus* (*Hesperophonus*) *cribricollis* (DEJEAN 1829): Iran (Ázarbaygân-e Bâkhtari); Israel. *Ophonus* (*Hesperophonus*) *jailensis* (SCHAUBERGER 1926): Türkei (Ankara, Antalya, Artvin, Kastamonu, Kocaeli, Zonguldak). *Ophonus* (*Hesperophonus*) *minimus* MOTSCHULSKY 1845: Türkei (Kars). *Ophonus* (*Hesperophonus*) *similis* (DEJEAN 1829): Iran (Ázarbaygân-e Garbi, Gilan, Khuzestan). *Ophonus* (*Hesperophonus*) *subquadratus* (DEJEAN 1829): Iran (Fârs); Syrien (Tartus). *Ophonus* (*Metophonus*) *gabrieleae* WRASE 1987: Griechenland (Préveza). *Ophonus* (*Metophonus*) *gammeli* (SCHAUBERGER 1932): Griechenland (Piería/Lárissa). *Ophonus* (*Metophonus*) *hittita* SCIAKY 1987: Iran (Hamadan). *Ophonus* (*Metophonus*) *israelita* PIOCHARD DE LA BRÜLERIE 1875: Iran: (Ázarbaygân-e Bâkhtari, Hamadan). *Ophonus* (*Metophonus*) *judaeus* PIOCHARD DE LA BRÜLERIE 1875: Jordan (Ammân, Irbid, Máan); Syria (Idlib). *Ophonus* (*Metophonus*) *stricticollis* TSCHITSCHÉRINE 1893: Sichuan (China). *Ophonus* (*Metophonus*) *subsinuatus* REY 1886: Israel. *Ophonus* (*Metophonus*) *transversus* MOTSCHULSKY 1844: Altai-Republik (Rußland). *Ophonus* (*Metophonus*) *veluchianus* G. MÜLLER 1931: Rumänien; Iran (Ázarbaygân-e Garbi); Syrien (Al Lâdhiqiyah). *Ophonus* (s.str.) *diffinis* (DEJEAN 1829): Iran (Ázarbaygân-e Bâkhtari). *Ophonus* (s.str.) *franziniorum* SCIAKY 1987: Französisches Festland (Var). *Parophonus* (s.str.) *dia* REITTER 1900: Zypern (Larnaca). *Parophonus* (s.str.) *vigil* TSCHITSCHÉRINE 1901: Türkei (Bingöl, İçel, Urfa). *Parophonus* (s.str.) *planicollis* (DEJEAN 1829): Iran (Mâzandarân). *Acupalpus* (*Palcuapus*) *inornatus* BATES 1873: Hunan (China). *Loxoncus circumcinctus* (MOTSCHULSKY 1858): Fujian, Hubei (China). *Stenolophus* (*Egadroma*) *bajaurae* ANDREWES 1924: Usbekistan (Surkhandarya); Indien (Delhi). *Stenolophus* (*Egadroma*) *difficilis* (HOPE 1845): Hubei (China). *Stenolophus* (s.str.) *discophorus* FISCHER VON WALDHEIM 1823: Syrien (Al Lâdhiqiyah). *Stenolophus* (s.str.) *liebmanni* J. MÜLLER 1931: Israel; Syrien (Al Lâdhiqiyah). *Stenolophus* (s.str.) *steveni* KRYNICKY 1832: Iran (Mâzandarân). *Platytarus* *famini* *famini* (DEJEAN 1826): Iran (Fârs, Hormozgân, Khorâsan). *Lebia* (s.str.) *cruxminor* *cruxminor* (LINNÉ 1758): Iran (Lorestan, Tehrân); Jordan (Al Karak, Maân). *Lebia* (s.str.) *cyancephala* *cyancephala* (LINNÉ 1758): Jordanien (Maân). *Lebia* (s.str.) *trimaculata* (LINNÉ 1758): Iran (Ázarbaygân-e Garbi, Fârs, Khorâsan). *Licinus* (s.str.) *aegyptiacus* DEJEAN 1826: Jordanien. *Badister* (s.str.) *meridionalis* PUEL 1925: Iran (Gilan); Türkei (Edirne, Afyon, Ankara). *Atranus* *ruficollis* (GAUTIER DE COTTES 1858): Syrien (Hama). *Calathus* (*Neocalathus*) *peltatus* KOLENATI 1845: Iran (Khorâsan). Bestätigungen von bisher zweifelhaften Verbreitungsangaben werden

angeführt von: *Siagona longula* REICHE & SAULCY 1855: Türkei (İçel). *Scybalicus oblongiusculus* (DEJEAN 1829): Türkei (Van). *Acinopus (Haplinopuss) striolatus* ZOUBKOFF 1833: Iran (Khorāsān, Hamadān). *Ophonus (Hesperophonus) subquadratus* (DEJEAN 1829): Marokko (Tétouan). *Ophonus (Metophonus) gabrieleae* WRASE 1987: Syrien (Taqtūs). *Ophonus (Metophonus) israelita* PIOCHARD DE LA BRÛLERIE 1875: Türkei (Adiyaman, Gaziantep, Şanlı Urfa). *Badister* (s.str.) *brevicollis* REICHE 1875: Griechenland (Ahaia, Árta, Préveza). *Badister* (s.str.) *bullatus* (SCHRANK 1798): Spanien (Leon, Lugo, Salamanca, Jaén?/Madrid?/Tarragona?).

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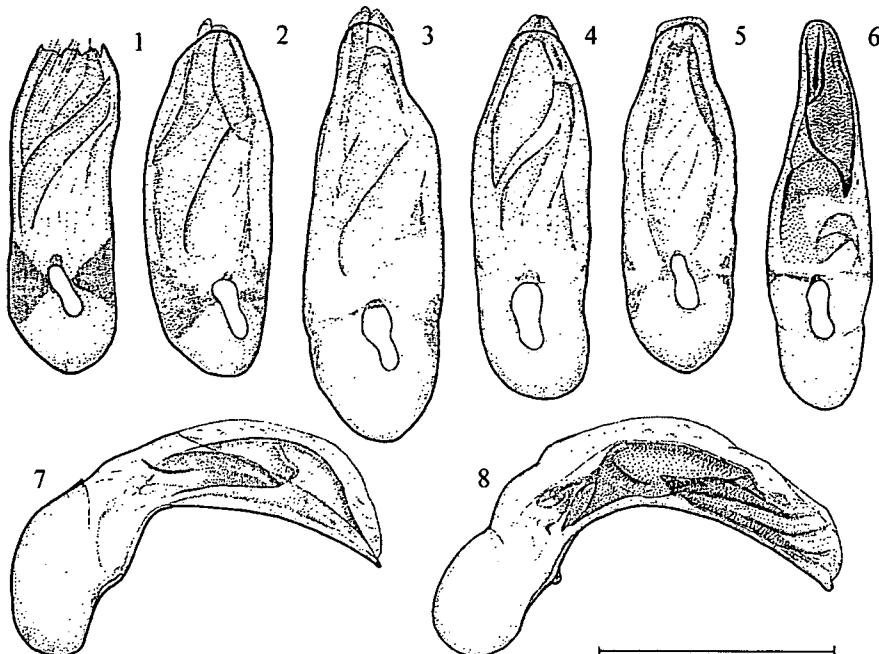
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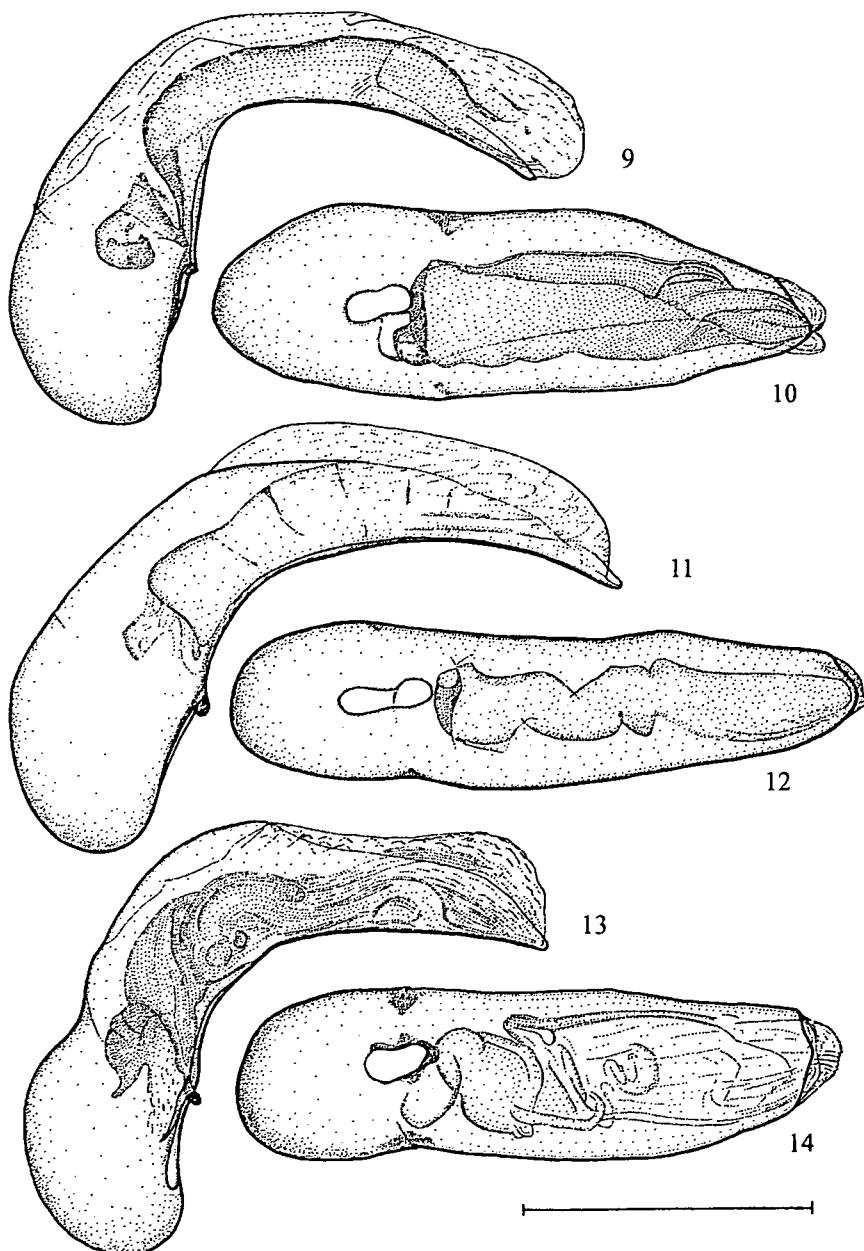
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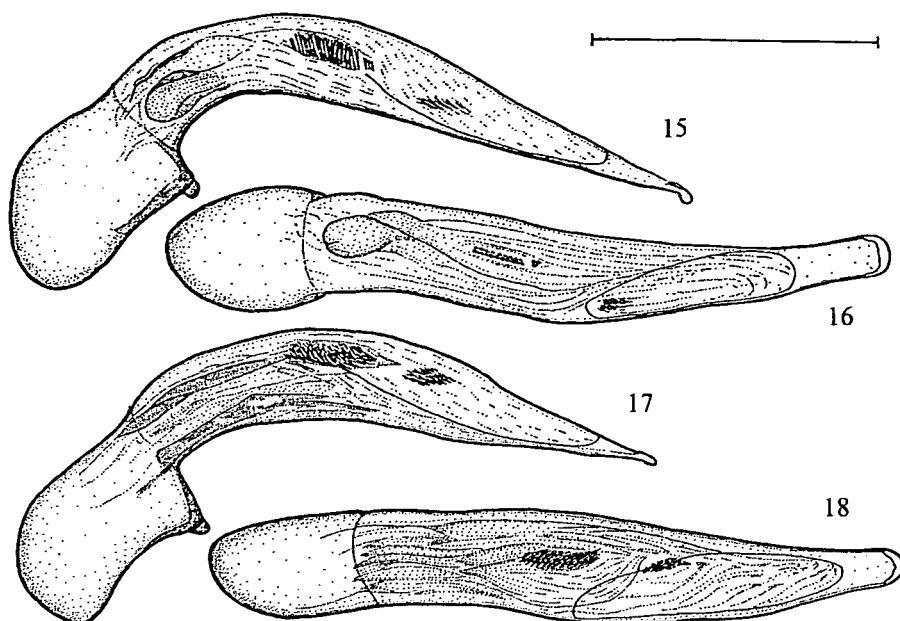


Figs 1-8: *Dixus*, median lobe (1-6: ventral view, 7-8: lateral view). 1-5, 7: *D. eremita* (DEJ.) holotype (1). lectotype *Aristus punctulatus* CHD. (2). Israel, Yodefat (3). Turkey, Mercan-Ovacık (4). Cyprus, Larnaca (5). Turkey, Kuruka geçidi (7). 6, 8: *D. semicylindricus* (PIOCH.). Tadzh., Hissar mts. (6). lectotype *Aristus lucidus* REITT., Ararat (8). Scale bar: 1 mm.

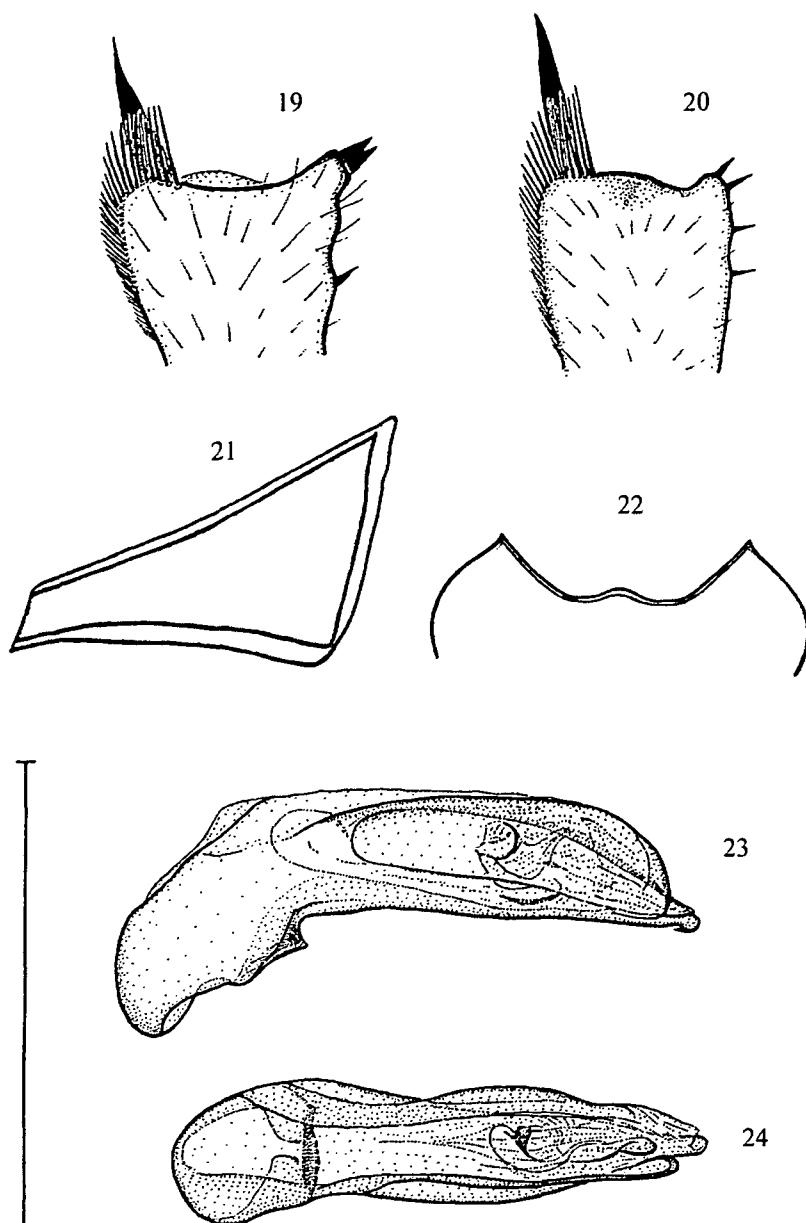


Figs 9-14: *Dixus*, median lobe (9, 11, 13: lateral view, 10, 12, 14: ventral view). – *D. moloch* (PIOCH.) (Israel, Ma'sada) (9, 10). *D. capito* (AUD. SERV.) (Spain, Sierra Nevada) (11, 12). *D. klapfferi* (JEDL.) (Jordan, Azraq Ash Shishan) (13, 14). Scale bar: 1 mm.

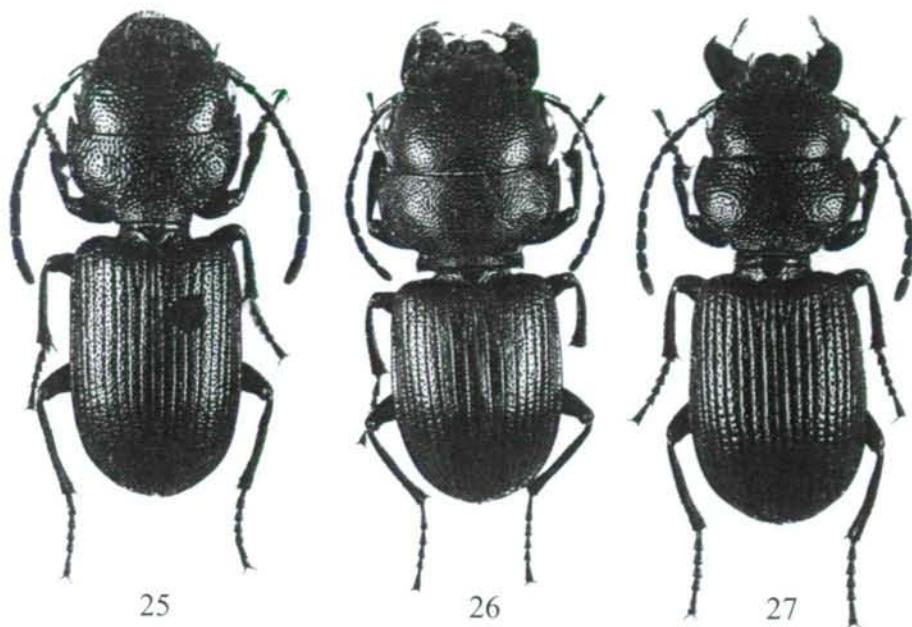
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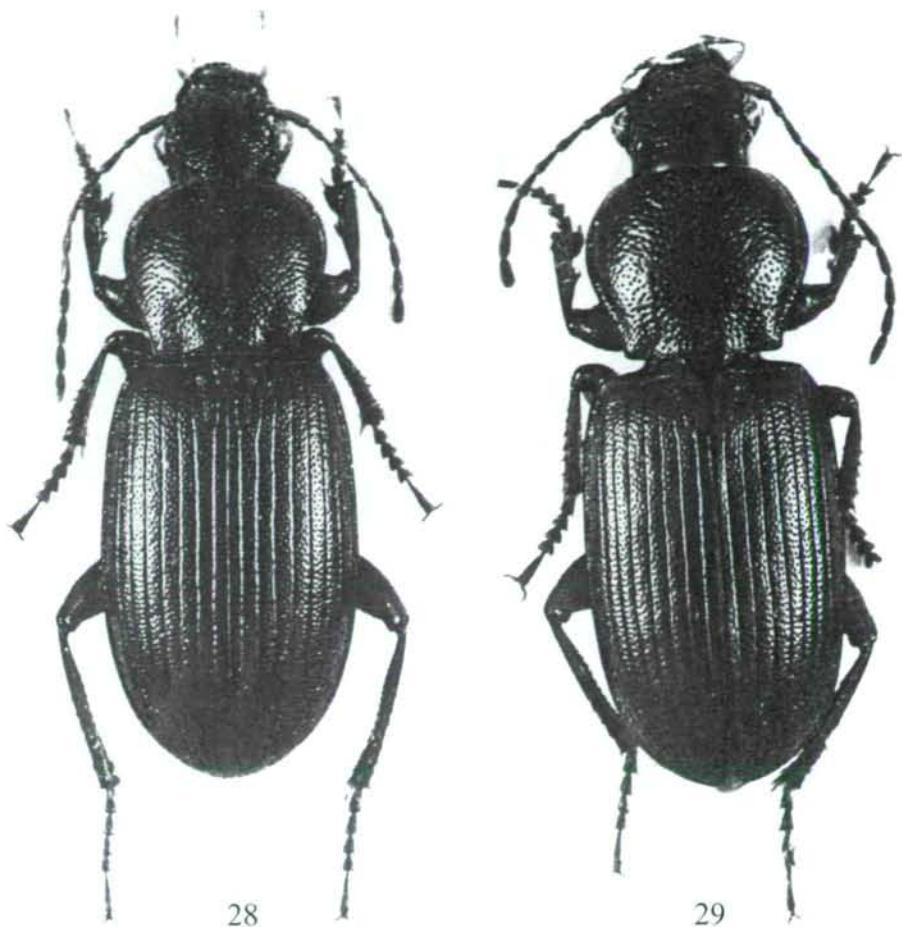
Figs 15-18: *Ophonus*, median lobe: lateral view (15, 17), dorsal view (16, 18). *O. heinzianus* WR. (paratype, Turkey, Gözen) (15, 16). *O. ophonoides* (JEDL.) (holotype) (17, 18). Scale bar: 1 mm.



Figs 19, 20: *Ophonus*, right fore tibia, apical part., dorsal view. *Ophonus ophonoides* (JEDL.) (holotype). (19). *O. heinzianus* WR. (paratype, Turkey, Gözen) (20). Figs 21, 22: Right metepisternum (21). – mentum (22). Figs 23, 24: *Badister brevicollis* REICHE, median lobe. (Greece, Pátra: Metochi). lateral view (23). dorsal view (24). Scale bar: 1 mm (Figs 19-24).



Figs 25-27: *Dixus*, habitus. – *Dixus eremita* (DEJ.) (holotype) (25). *D. klapperichi* (JEDL.) (Jordan, Assam) (26). *D. moloch* (PIOCH.) (Israel, Ma'sada) (27).



Figs 28, 29: *Ophonus*, habitus. *O. heinzianus* WR. (paratype, Turkey, Gözen) (28). *O. ophonoides* (JEDL.) (holotype) (29).

Table 1: Data on variation in some values among *Dixus* species

species	sex	n	BL/mm	PW/PL	Ø	PW/HW	Ø	PW/PBaW	Ø	EL/EW	Ø
<i>eremita</i>	♂	17	6.9-11.1	1.83-2.09	2.03	1.00-1.14	1.07	2.00-2.43	2.20	1.32-1.46	1.38
<i>eremita</i>	♀	18	6.8-9.7	1.74-1.97	1.85	1.05-1.15	1.11	1.85-2.24	2.08	1.34-1.46	1.40
<i>semicylindricus</i>	♂	10	5.8-11.1	1.61-2.13	1.85	1.01-1.11	1.05	1.76-2.14	1.90	1.35-1.45	1.39
<i>semicylindricus</i>	♀	10	6.1-8.5	1.46-1.87	1.74	1.08-1.15	1.12	1.63-2.00	1.85	1.33-1.46	1.39
<i>moloch</i>	♂	10	8.6-10.2	1.54-2.05	1.75	1.04-1.16	1.12	1.82-2.06	1.91	1.29-1.48	1.39
<i>moloch</i>	♀	10	8.3-9.4	1.61-1.78	1.68	1.06-1.15	1.10	1.77-1.97	1.79	1.35-1.52	1.40
<i>capito</i>	♂	10	12.6-14.7	2.00-2.24	2.08	1.04-1.11	1.08	1.96-2.27	2.16	1.30-1.37	1.32
<i>capito</i>	♀	10	10.7-13.7	1.80-1.98	1.90	1.06-1.15	1.12	1.94-2.11	2.02	1.31-1.40	1.35
<i>klapperichi</i>	♂	3	15.3-16.4	1.98-2.00	1.99	1.04-1.08	1.04	1.63-1.77	1.69	1.31	1.31
<i>klapperichi</i>	♀	1	15.0	1.92		1.08		1.68		1.30	

Table 2: Data on some values among types of *Dixus* taxa

taxon	sex	status	BL/mm	PW/PL	PW/HW	PW/PBaW	EL/EW
<i>eremita</i>	♂	HT	9.7	2.03	1.05	2.24	1.46
<i>punctulatus</i>	♂	LT	9.8	2.06	1.07	2.12	1.38
<i>punctulatus</i>	♂	PLT	9.6	2.09	1.07	2.18	1.36
<i>punctulatus</i>	♀	PLT	8.4	1.93	*	2.23	1.40
<i>curtangulus</i>	♂	LT	10.4	2.05	1.01	2.18	1.41
<i>curtangulus</i>	♀	PLT	10.2	1.92	1.07	2.09	1.33
<i>curtangulus</i>	♀	PLT	9.8	1.94	1.09	2.19	1.34
<i>tanaiticus</i>	♂	LT	10.2	2.09	1.07	2.28	1.38

* head capsule partly destroyed

Table 2: Continuation

taxon	sex	status	BL/mm	PW/PL	PW/HW	PW/PBaW	EL/EW
<i>capito</i> var. <i>orientalis</i>	♀	LT	8.0	1.88	1.12	2.19	1.43
<i>lucidus</i>	♂	LT	8.8	1.90	1.16	2.01	1.40
<i>semicylindricus dsungaricus</i>	♂	HT	7.8	1.60	1.14	1.71	1.43
<i>semicylindricus persianus</i>	♂	LT	7.5	1.71	1.12	1.85	1.41
<i>semicylindricus persianus</i>	♀	PLT	6.6	1.75	1.10	1.79	1.35
<i>semicylindricus persianus</i>	♀	PLT	7.4	1.70	1.09	1.92	1.38
<i>moloch</i>	♂	LT	9.0	1.45	1.08	1.74	1.40
<i>moloch</i>	♀	PLT	8.5	1.66	1.06	1.77	1.38
<i>moloch</i>	♀	PLT	8.8	1.68	1.10	1.97	1.35
<i>haagii</i>	♂	LT	13.0	2.00	1.09	2.18	1.37
<i>haagii</i>	♂	PLT	14.0	2.08	1.04	2.20	1.31
<i>haagii</i>	♀	PLT	12.0	1.93	1.14	2.07	1.31
<i>klapperichi</i>	♂	PT	13.9	2.00	1.04	1.77	1.31
<i>klapperichi</i>	♀	PT	12.7	1.92	1.08	1.68	1.31

Table 3: Data on variation in some values among *Ophonus heinziatus* WR. and *O. ophonoides* JEDL.

species	sex	n	status	BL/mm	PW/PL	Ø	PW/HW	Ø	PW/PBaW	Ø	EL/EW	Ø
<i>heinziatus</i>	♂	4	PT	9.4-10.8	1.19-1.24	1.22	1.45-1.49	1.47	1.34-1.44	1.39	1.52-1.70	1.61
<i>heinziatus</i>	♀	2	PT	8.4-10.9	1.21-1.29	1.25	1.39-1.42	1.41	1.33	1.33	1.52-1.54	1.53
<i>ophonoides</i>	♂		HT	8.9	1.25	-	1.45	-	1.43	-	1.61	-
<i>ophonoides</i>	♀		PT	10.1	1.25	-	1.40	-	1.40	-	1.53	-
<i>ophonoides</i>	♂	4	-	8.9-9.8	1.22-1.25	1.22	1.40-1.45	1.44	1.30-1.43	1.39	1.52-1.61	1.57
<i>ophonoides</i>	♀	2	-	9.8-10.1	1.25	1.25	1.40-1.49	1.44	1.40-1.41	1.41	1.53-1.61	1.57